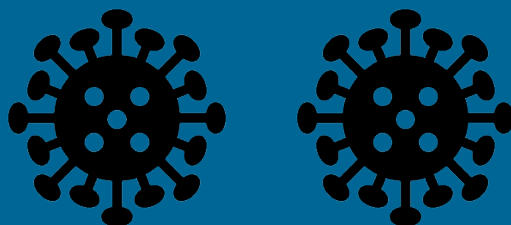


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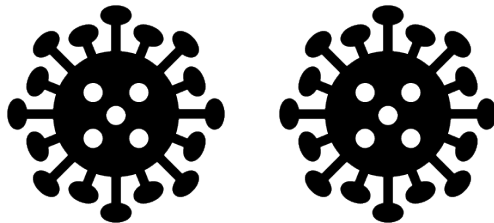


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ATTEMPT TO UNDERSTAND PUBLIC-HEALTH RELEVANT SOCIAL DIMENSIONS OF COVID-19 OUTBREAK IN POLAND

ANDRZEJ JARYNOWSKI¹, MONIKA WÓJTA-KEMPA², DANIEL PŁATEK³, & KAROLINA CZOPEK⁴

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ABSTRACT: Recently, the whole of Europe, including Poland, have been significantly affected by COVID-19 and its social and economic consequences which are already causing dozens of billions of euros monthly losses in Poland alone. Social behaviour has a fundamental impact on the dynamics of the spread of infectious diseases such as SARS-CoV-2, challenging the existing health infrastructure and social organization. Modelling and understanding mechanisms of social behaviour (e.g. panic and social distancing) and its contextualization with regard to Poland can contribute to better response to the outbreak on a national and local level.

In the presented study we aim to investigate the impact of the COVID-19 on society by: (i) measuring the relevant activity in internet news and social media; (ii) analysing attitudes and demographic patterns in Poland. In the end, we are going to implement computational social science and digital epidemiology research approach to provide urgently needed information on social dynamics during the outbreak.

This study is an *ad hoc* reaction only, and our goal is to signal the main areas of possi-

ble research to be done in the future and cover issues with direct or indirect relation to public health.

KEYWORDS: medical sociology, social distancing, social contact patterns, infectious disease epidemiology, SARS-CoV-2, media communication, risk perception, panic

INTRODUCTION

Social behaviour affects the dynamics of the spread of infectious diseases such as SARS-CoV-2 (virus), but these issues were very often omitted by medical researchers (Squazzoni, et al. 2020). The COVID-19 (disease) pandemic caused not only a massive, global health crisis, but also a reconfiguration of the established forms of social life. The virus contributes to profound disruptions in:

- economy – global shortages in product supply and falls in services, production and stock markets;
- society – possible occurrence of panic, restrictions on migration and participation in social events;
- culture – restriction of freedoms and stringent mitigation measures.

In a macro scale, mitigation strategies such as ‘social distancing’ and ‘lock-down’ entail high costs for the national economy and supply chains and are not easily sustainable in the long run. In contrast, in a micro-scale, they lead to various responses of individuals, from panic and fear to misinterpretation and disobedience (Sowada 2020). In the face of a pandemic, badly informed people tend to panic, which may lead to bad decision-making and/or high stress levels, causing anxiety or aggression (Frewer 1996). People who are not fully informed seek further information on the Internet, which is full of diverse content, but expert knowledge may not be easy to find and comprehend (Gonsalves, Staley 2019). In those circumstances, the lay networks arise as the main source of social norms. In this paper, we strive to explore the community perceptions and practices around COVID-19 in the context of Polish society.

The structure of the article is as follows: after presenting theoretical background from the fields of epidemiology and sociology, we analyse behaviour patterns and reactions to the epidemic (social mobilization and atomization, panic, information propagation, risk perception) with a particular focus on internet and demographic data. We also examine the specificity of the Polish context by studying responses to the present situation from various perspectives (sociolinguistics, demography, values and attitudes).

AIM

Although most aspects of COVID-19 fall into the research area of medical science, social science researchers have not only data, resources and knowledge, but also a

professional and moral responsibility to contribute to broadening our understanding of this phenomenon (Sitek 2007). Therefore, we want to model and understand social mechanisms during the COVID-19 outbreak from an epidemiological and sociological perspective. To do so, we aim to investigate:

- the specificity of Polish society in terms of sociological and epidemiological aspects of COVID-19,
- the impact of COVID-19 on the society by measuring the relevant activity in internet news and social media (Jarynowski, Wójta-Kempa, Belik 2020A),
- the role of panic and behavioural change in case of an epidemic.

Moreover, we want to present a comprehensive perspective of empirical data and studies about Polish society relevant directly and indirectly to public health. The selection of content contained in this work is the result of treating public health as an interdisciplinary concept, aiming at “(...) preventing disease, prolonging life and promoting health through the organized efforts of society” (Acheson 1988). Only by coordinated actions of government and society, supported by many branches of sciences, can contemporary health problems be solved. We believe that this analysis could contribute to the improvement of the response to the epidemic on a national and local level via well-targeted information campaigns that take into consideration behavioural, demographic, cultural and other contexts.

EPIDEMIOLOGICAL BACKGROUND

On March 11th, 2020 the World Health Organisation declared the coronavirus outbreak a pandemic (WHO 2020), because European countries struggle to fight the disease. In Poland, virus infectivity (Jarynowski, Grabowski 2015) is moderate (natural $R_0 \sim 2.5$ (Worldometer 2020), explicit estimation based on positive tests $R_0 = 3.1$ (Boch et. 2020), effective $R_0 = 1.7$ (Interdisciplinary 2020C)) and mortality is low (<1% [Worldometer 2020]) in young and healthy populations (according to the current data up until the end of March).

The most important transmission routes of the virus are either direct (airborne), or indirect (through contact with contaminated surfaces). In most cases, the virus requires close contact over a longer time period to be transmitted (majority of infections occur in the same household or studying/working place). However, there are additional and less probable, but possible routes such as any indirect physical contact or even using items which were used by an infected person. Up until now (end of March 2020) there is no effective vaccine and no specific validated drug therapy against COVID-19 and there are epidemic outbreaks in all EU countries. So far, the only mitigation methods include:

- contact reduction (social distancing, e.g. isolation / quarantine, restrictions for travel or mass gatherings);
- reduction of the probability of infection transmission (e.g. standard precau-

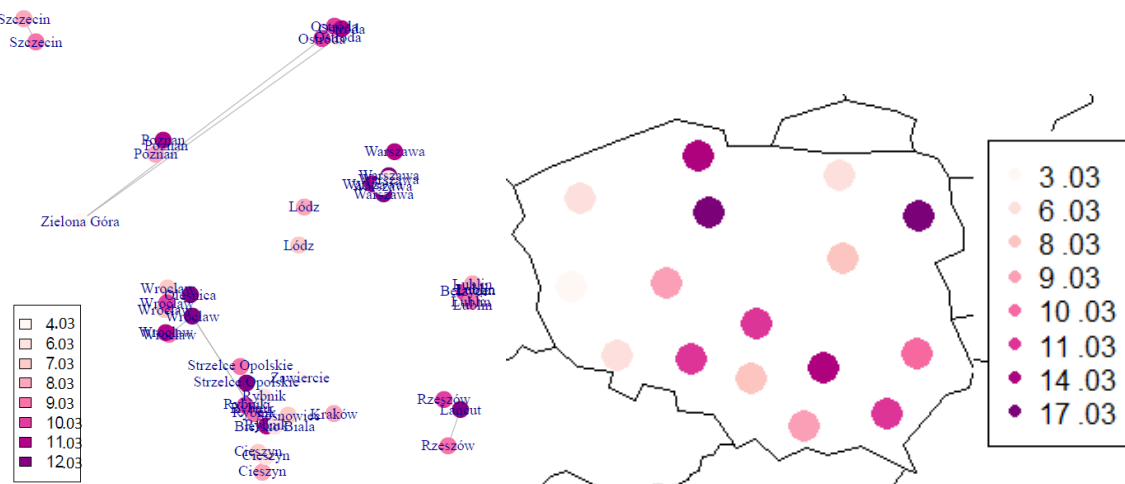
tions such as hand hygiene or immunomodulation such as ‘healthy lifestyle’);

- decreasing infectious period (e.g. testing, contact tracing, treatment).

In Poland the first case was officially confirmed on 04.03.2020 (ECDC 2020). Majority of the first 50 cases were imported (lack of epidemiological link on Fig. 1). Moreover, social distancing measures such as school closure (11.03), services closure (16.03) and significant mobility restriction (24.03) were announced.

At the same time, general guidelines from WHO on how to prevent the spread of the virus are subject to interpretation at the state level, which results in the introduction of different strategies and measures with a varying degree of strictness. Generally, epidemiology of SARS-CoV-2 can offer in general two macroscopic strategies of action against the spread of the virus (Pueyo 2020): suppression (i.e. lockdown of whole cities like in Wuhan) and “flattening the curve” (by social distancing and contact tracing). Optimizing public health strategy can be supported by computational social sciences (Squazonni, et al. 2020) and qualitative behavioural sciences (Van Bavel et al. 2020).

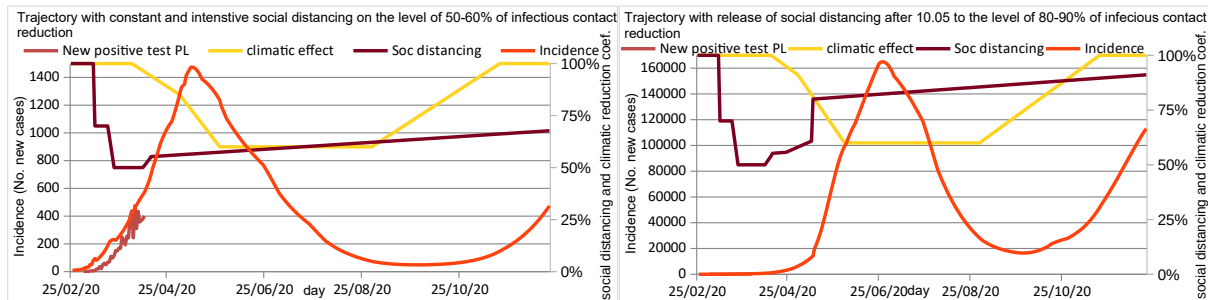
Figure 1. Geography of SARS-CoV-2 epidemic. [Left] Outbreak network of the first 48 cases of COVID-19 in Poland (edge – epidemiological link, node – infected patient, coordinates and names – countries and geographical coordinates with noise, colors – date of confirmation 03-12.03). [Right] Arrival time of the first case to each voivodeship.



Source: Visualisation own based on Wyborcza data (2020) and ECDC (2020)

This poses an interesting question: why some states (i.e. China and South Korea) are coping with the epidemic much better than others (i.e. Italy or Iran)? There is no simple answer, as a number of complex and dynamically related variables come into play here.

Figure 2. Projection of incidence (No. of new cases of infections) with correction by distancing and climatic coefficients (reduction of infection probability in %) with constant intensive distancing [left] and with releasing social distancing regime after 10.05¹ [right]



Source. Visualisation own based on data from Poland till 02.04.2020 (ECDC 2020) and parameters from (Interdisciplinary, 2020C)

Implementing radical policies (as it is happening in Poland) could be a matter of several dozen thousand [Fig. 2 left] against millions [Fig. 2 right] of infections in smaller-scale restrictions scenarios. With an already dysfunctional healthcare system struggling with lack of staff (Poland has the lowest number of physicians per capita in EU (Eurostat 2019) and OECD (OECD 2019) and 3rd lowest number of nurses per capita in EU (Eurostat 2019)) and lack of personal protective equipment, it could lead to almost a hundred thousand of additional deaths in the worst-case scenario [Fig. 2 right]. In the EU, only Sweden follows a cost-effective strategy of minimizing harms to the national economy with nationalized immunization (Folkhalsomyndigheten 2020). According to Fredrik Liljeros, a world-famous sociologist specialising in infectious diseases, “Swedish strategy is more scientifically based than anywhere else” (BCC 2020). However, Swedes are expecting that the need for Intensive Care Unit beds could exceed its current capacity by even 10 times in the peak of the epidemic (ICU Swe 2020). For this reason, they are currently building field wards and are developing ethics for triage and patient selection criteria (Folkhalsomyndigheten 2020).

SOCIOLOGICAL BACKGROUND

Sociological analysis of health issues deals with the complex relationship between mass culture and medical knowledge. For this reason, there is no direct translation between scientific evidence (e.g. the question of the effectiveness of vaccination or protective masks in infection prevention) and colloquial knowledge describing an infectious disease (Taranowicz 2010). Due to the fact that different agents perceive the risks associated with the virus differently (including scholars, who present extremely different, often unsupported opinions), perception analysis is necessary, and it con-

¹ Assuming a simple SEIR (Jarynowski, Grabowski 2015) model for Poland and the following parameters: incubation period: 4.5 days; infectious period / time until isolation: 6.5 days; average daily infectious contacts; 40 imported cases from abroad since 25.02; climate (weather) correction decrease of infectivity by 25% in summer, (e.g. due to the virus’s susceptibility to high temperatures, different structure of physical contacts and induced immunity); social distancing is reducing contacts up to 40%.

stitutes the main purpose of this article. Using elements of the actor-network theory (ANT (Latour 1999)), we emphasize the essence of semiotic networks, stressing the agency of the biological viral factor affecting the behaviour of people (actors). The field, or space of potential semantic connections between meanings is expressed by representatives of various organizations, social capital or ideology. We are also interested in the way (Diani 2015) actors cooperate with each other, distribute resources or enter into conflict, drawing boundaries for each other.

The Internet covers 85% of the total literate population in Poland (PBI 2020), encompassing most demographic categories with a small exclusion of elderly people (affinity index <80) and marginalized groups (affinity index <80). Recently, due to social distancing, most social contacts in most age categories have moved from the physical to the virtual world. As a consequence, it serves as a particularly valuable source of data on social dynamics as perception of the current situation. With the help of this source, we can investigate the following phenomena:

- interest in events related to the coronavirus in the world and in Poland;
- people's behavior towards the epidemic and each other;
- estimation of threats pertaining to virus transmission and its consequences to our country as declared by Poles;
- information needs, fears and concerns, media coverage, conflicts in the public and political sphere, the effectiveness of information campaigns;
- operation of various national (Sanitary Inspection, Ministry of Health) and regional institutions (hospitals, offices, local authorities, etc.);
- humour: the spread of memes, conspiracy theories and fake news in social networks.

The spread of information and opinions (product life cycle) can be compared to an epidemic (Coleman et al. 1957; Jarynowski et al. 2014; Jarynowski and Buda 2018). It starts with the phase of growing interest (the so-called "early adoption"), continues to the phase of general interest (the so-called "majority") to eventually lose popularity (the so-called "laggard stage"). This approach could be potentially useful in researching the dynamics of the spread of the aforementioned phenomena.

The critical aspect of the coronavirus epidemics comprises the social consequences of social isolation (voluntary quarantine). From the sociological point of view, it causes many phenomena that can have both beneficial and adverse outcomes. The #stayathome action has put Poles in a new, unusual, unimaginable situation. In the intergenerational context, restrictions and isolation can be compared only to martial law introduced in Poland in 1981 ("the millennials are now having their own martial law" (WP 2020)). Individual and social fear has an increasingly visible face.

1/ In the dimension of interpersonal communication, we transferred our "first life" to the Internet and digital communicators. This is the most crucial channel of contacts

within non-family social networks. For citizens in quarantine, this is the only way to contact their loved ones and get emotional support. This “mediated bond” is accepted, nurtured and refreshed. Isolation will determine how much this “worse” form of communication will save relationships and businesses. Social actors who effectively used on-line communication in the past are better prepared and probably take some advantages from the situation.

2/ Isolation causes social atomization not only in physical but also in the normative dimension. The core of the problem lies in the question: How do we know what others think when we can’t discreetly look at them and copy some useful solutions? When we are condemned to television or Internet authorities (which are now basically the same), the ability to create and adjust bottom-up standards (social norms) is very limited or even impossible.

3/ The third important consequence of isolation is “constrained familism”. On the one hand, this concentration on current family needs is widely accepted, but on the other hand, it will not always strengthen family ties. In isolation and under the pressure of overwhelming fear (for health, work, money), conflicts, neglect and violence against the weakest family members may tend to intensify. In the context of mental health, the multiplication of social roles and their concentration in the home area may be noxious, especially in families with children or quarantined family members.

4/ Sociologists may also be interested in the fact that isolation orders may cause a specific sociological vacuum (Nowak 1979) and they may threaten the condition of civil society and democracy in Poland.

5/ Social isolation can have political consequences. The unexpected necessity of fighting with coronavirus and emerging shortages of supplies, tests and personal protective equipment have posed a threat to the presidential elections scheduled for 10.05.2020², which the presidential candidates are striving for (except for President Andrzej Duda, seeking re-election). This kind of “medicalization of politics” and political rivalry in the conditions of domestic isolation of the whole society may cause even stronger polarization of the political scene and increase the probability of social unrest. When candidates cannot participate in a fair political run for office of the President, and when citizens are forced to vote in spite of health and life danger, there is no reliable debate preceding election decisions. The medicalization of politics in the context of presidential elections may increase the probability of violating the quarantine rules, civil disobedience or the distribution of social capital in Polish society.

SOCIOLINGUISTICS

It is worth to take a look at terminology related to the virus, as well as its social reception. First of all, there is a nontrivial relationship between the official names of SARS-CoV-2 virus and the disease COVID-19 and their colloquial counterparts, such as “coronavirus” [fig. 3], also known as “corona”, “virus from Wuhan” etc. A certain tension between the former and the latter type of terminology can be observed, which will definitely become the subject of interest for (socio)linguists and anthropolo-

² Possible scenario of releasing social distancing regime on 10.05 is visualized on Fig. 2 right.

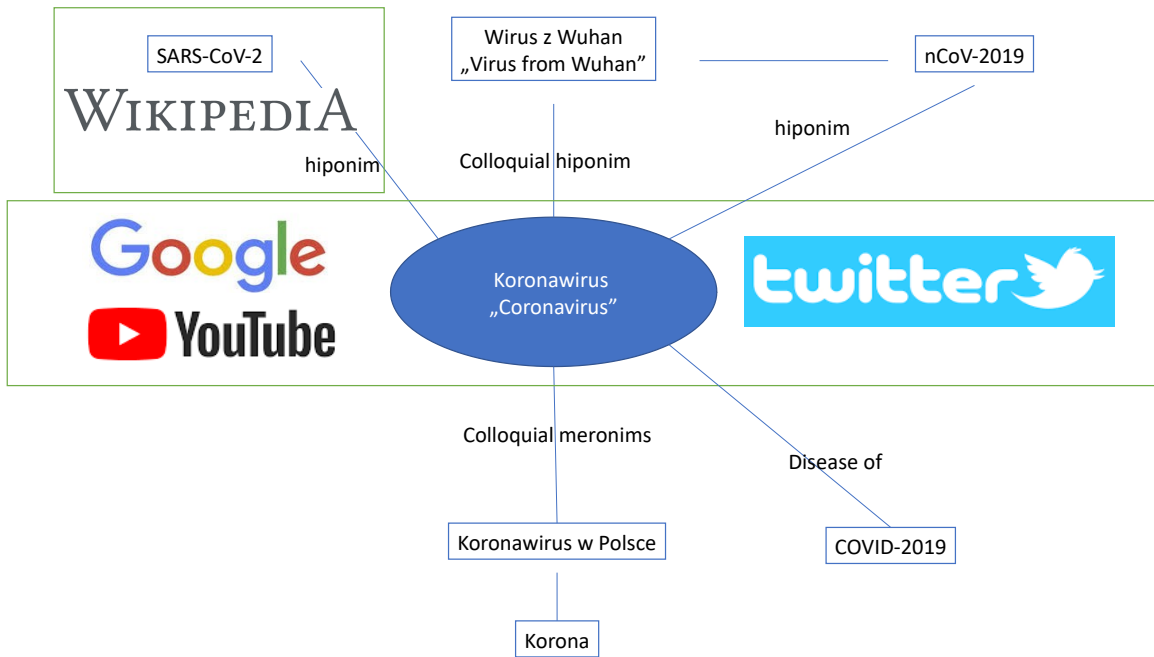
gists. Individuals may favour more colloquial terms since the formation of euphemistic counterparts of particular words minimizes communicative discomfort of the addressee of the message (Allan & Burridge 1991). On the other hand, medical terms and accurate messages are linked with the trustworthiness of the source (Frewer et al. 1996).

The phrase “social distancing” (Long, 2020) has been receiving attention from academics across the fields, frequently referring to its problematic character. Anthropologists point to the fact that the term is, in fact, an oxymoron, but despite this fact, it was quickly naturalised by language users (Laszczkowski 2020). Sociology-wise, the meaning of ‘social distancing’ interferes with the sociological term of ‘social distance’ promoted by segregation of Schelling (1971). From the medical perspective, it is noticed there exist medical definitions of quarantine and isolation (Sejm, 2020). Still, the term ‘social distancing’ is medically blurred and could have various meanings for particular individuals. Lastly, behavioural scientists advocate the replacement of “social distancing” with “physical distancing” in order to emphasize the fact that in spite of physical isolation, there exists a possibility of maintaining social contacts through the use of technology (Bavel et al. 2020).

Moreover, the spread of rumours and misinformation (Kassan 2020) has created uncertainty and mistrust, which is affecting the effective response of responsible units. Obviously, the media are an important actor shaping public attention, with a repertoire of tools such as metaphors (e.g. medical staff are ‘superheroes’ and the virus is ‘an enemy’), Cuisinart effect (mixing fiction with reality), conspiracy theories, etc. (Hordalska 2016). Media messages can on the one hand build national solidarity and the sense of identity, but, on the other hand, they may contribute to the promotion of nationalistic ideas, blaming for the epidemic on particular nations or races, or they can worsen internal political conflicts.

Beyond any doubt, examining understanding, feelings and attitudes towards the current COVID-19 situation will be needed. Thus, a sociolinguistic analysis could largely contribute to understanding the related phenomena, further describing the origins, dissemination, use and functions of the terminology that occurred during the epidemic (especially in the mainstream media), taking into consideration both micro- (individuals, small communities) and macro (social groups, nations) scale.

Figure 3. Concept map and relationships between concepts related to “coronavirus” and media platforms where a given term is used.



Source: Visualisation own with the use of logotypes of media platforms

RISK PERCEPTION

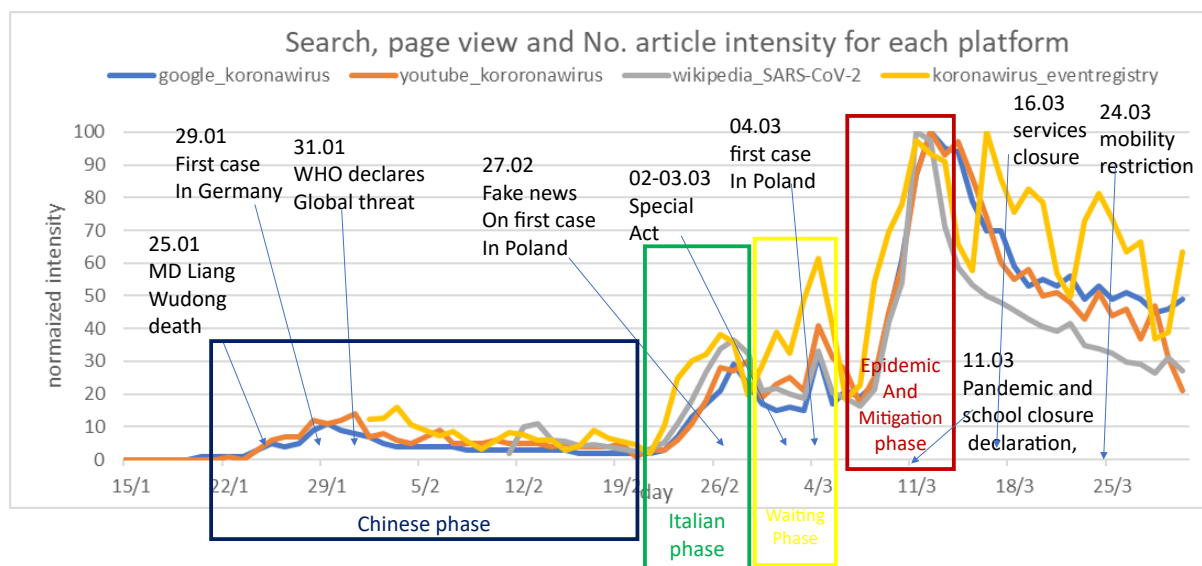
Risk perception is not as simple as the term used in risk assessment, i.e. value at risk (expected value of loss with a given probability of an event), but a complex socio-psychological construct with all its biases and errors (Gigererenzer, Edwards 2003). For instance, on average, people believe that adverse events like infection and death are less likely to happen to them than to others (Doliński, et al. 1987). In the previous epidemics (A/H1N1, SARS, Ebola) in the Internet era (Jarynowski and Belik 2018), societies experienced quite similar phases of interest starting with fear, then moving to practical issues such as prevention and ending with scapegoating (Gonzalez, Stanley 2014; Gałuszka 2017).

Probably, in the history of the Internet, no other phenomenon has ever received such a degree of attention as the coronavirus epidemic. In the present section, we assess the perception of SARS CoV-2 virus and COVID-2019 disease using quantitative analysis of agents and events in online media (Jarynowski et al. 2014). As far as we know, no previous studies quantitatively link the Internet activities and risk perception of infectious diseases in Poland (Samaras et al. 2020; Nuti et al. 2014). Thus the present study is still an attempt to fill this gap with a data-driven exploratory approach (without fixed hypothesis).

According to opinion polls, in late February (IBRIS 2020) less than half of Polish society ranked “koronawirus” as the most important topic, however, in mid-March, it

was as much as 2/3 (OKO 2020) and in the end of March over 75% of Poles (PAP 2020)⁵.

Figure 4. The daily intensity of the “Coronavirus” topic on various media platforms (15.01-30.03.2020) in Poland. Time series normalized so that 100 means maximum value for a given series.



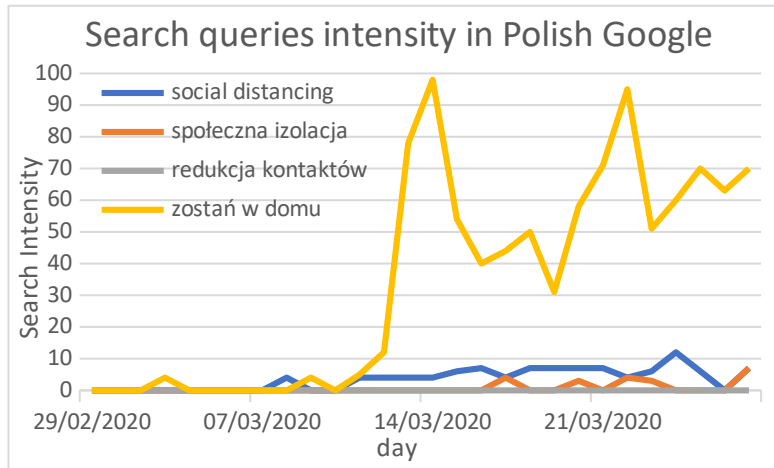
Source: visualisation own based on: google_koronawirus – queries “Koronawirus” in Polish Google by Google Trends (2020), Wikipedia_SARS-CoV-2 (Wikipedia (2020) – page views for “SARS-CoV-2” in Polish Wikipedia, youtube_koronawirus – queries “Koronawirus” in Polish YouTube by Google Trends (2020), koronawirus_eventregistry – Number of articles with keyword “koronawirus” in article body and country: Poland and language: pl in news collector EventRegistry (2020).

“Koronawirus” was not the most important topic in Poland until the declaration of restrictions in educational institutions and border closure around March 11, 2020. Since then, attention paid to this topic in Internet media platforms has been decreasing [fig. 4] as the lifetime of the concept moves to its mature phase and gives a place to new concepts such as “Stay at home” [Fig. 5].

Another issue posited by the current situation occurs on the level of cultural fluency, as one needs to understand the government messaging concerning, for instance, social distancing [Fig. 5]. While there exist medical definitions of quarantine and isolation (Sejm, 2020), the term “social distancing” (Long 2020) is medically blurred and could have various meanings for particular individuals. Moreover, indirect messages of “trying to avoid” social gatherings may be interpreted differently, thereby putting some groups and areas at a higher risk of contagion. Therefore examining understanding of the official state decisions, as well as feelings and attitudes towards the current COVID-19 situation is necessary.

⁵ However, each of these surveys might have been conducted according to a different methodology.

Figure 5. Perception of social distancing concept via various search terms (queries): social distancing, społeczna izolacja (social isolation), redukcja kontaktów (contact reduction), zostań w domu (stay at home).

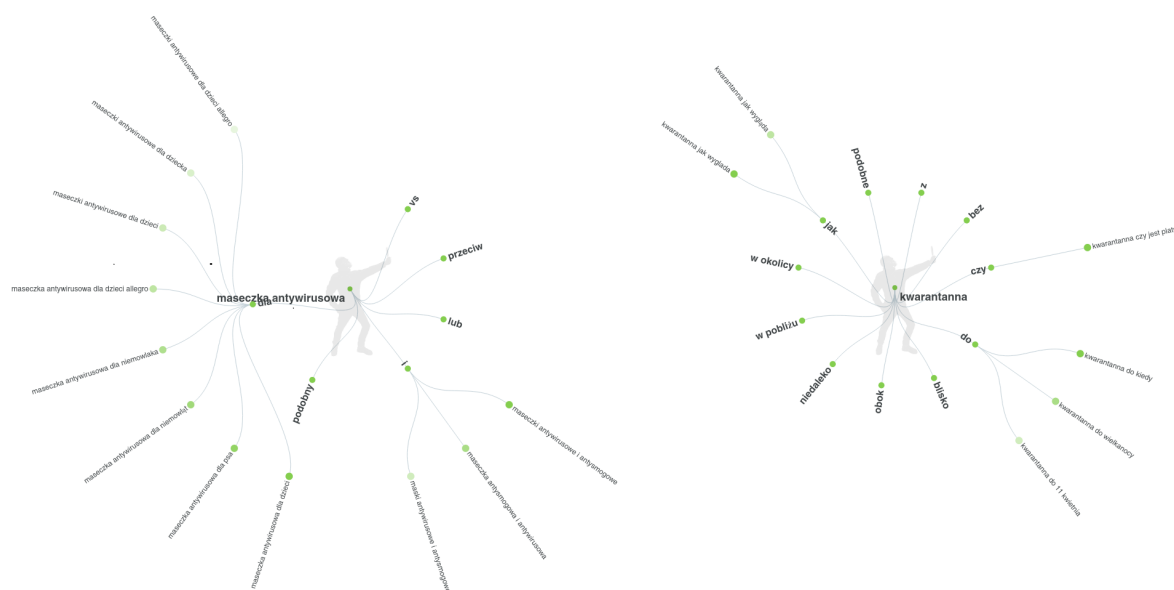


Source: Visualisation own based on Google Trends data (2020).

As far as targeting information campaigns is concerned, some interesting conclusions can be drawn from semantic networks of topics related to COVID-19 in Google. Let us consider the example of an antiviral mask [Fig. 6]. The antiviral mask is a colloquial term (there is no such medical term), and it could be related to pre-panic behaviour in situations when information needs are unsatisfied (Jarynowski, Wójta-Kempa and Belik 2020A). If a culture of fear (Furedi 2006) is high enough, people's perception of danger increases faster than the actual level of risk. On the semantic map [Fig. 6], we can see, for instance, that this kind of protection is mostly researched in the context of children. If we connect it with another observation that around 85% of medicine-related content in Polish Internet is generated by women (Jarynowski and Belik 2018), we could conclude that targets of information campaigns should also be women. The second topic which is worth looking at is "quarantine". In this case, we can see that legal and financial aspects dominate the semantic network and medical context is not searched for (possibly due to the fact that it is not interesting to society or clear enough).

Ultimately, data analysis can also be biased due to the involvement of media platform content presenting algorithms in the discourse. In conclusion, Polish authorities, having a reliable analysis of the perception of the problem, could optimally prepare and manage the social dimension of the current epidemic and future ones.

Figure 6. Semantic networks of topics related to COVID-19 from Google queries generated by Askthe-public. [Left] Topics related to “maseczka antywirusowa” (antiviral mask), [Right] Prepositions related to “kwarantanna” (quarantine).



Source: Generated with Answerthepublic (2020)

COMMUNICATION AND INFORMATION PROPAGATION

We can observe an external increase in virtualization of both the Polish economy (i. e. remote working) and most categories of society (Sułkowski 2020), so information is now delivered mainly through digital channels. An interesting instance of this kind of „digital shift” can be observed in the field of education. According to UNESCO, 188 countries have implemented country-wide closures of educational institutions so far, which encompasses 91,3% of all enrolled learners (UNESCO 2020). Some countries, including Poland, are now focusing on ensuring the delivery of educational services in the form of distant learning (Gładysz and Maleńczyk 2019; Zaród 2013). However, in Poland, the digitisation process has been more developed in higher education (Maleńczyk, Gładysz and Marciniak 2019) and it is mostly at primary and secondary levels that we are now witnessing a rapid move forward. The epidemic necessitated fast implementation of this solution, which resulted in the fact that there was no debate over pragmatic issues, i.e. its cost-effectiveness in comparison to traditional education. Should the digitisation process be sustained after the pandemic is over, one could hope for a number of positive outcomes of this process. Firstly, didactic methods could be more attuned to the needs of „digital natives”, being more focused on developing students’ critical thinking and ability to use the information and data available online. Secondly, we can hope for the design of more interactive textbooks and other educational resources. Lastly, digital tools could be useful to track students’ progress more systematically or to control the quality of teaching.

The field which, unlike education, is not undergoing major changes, but which has a huge role to play in the current situation is the media. Social and traditional media can

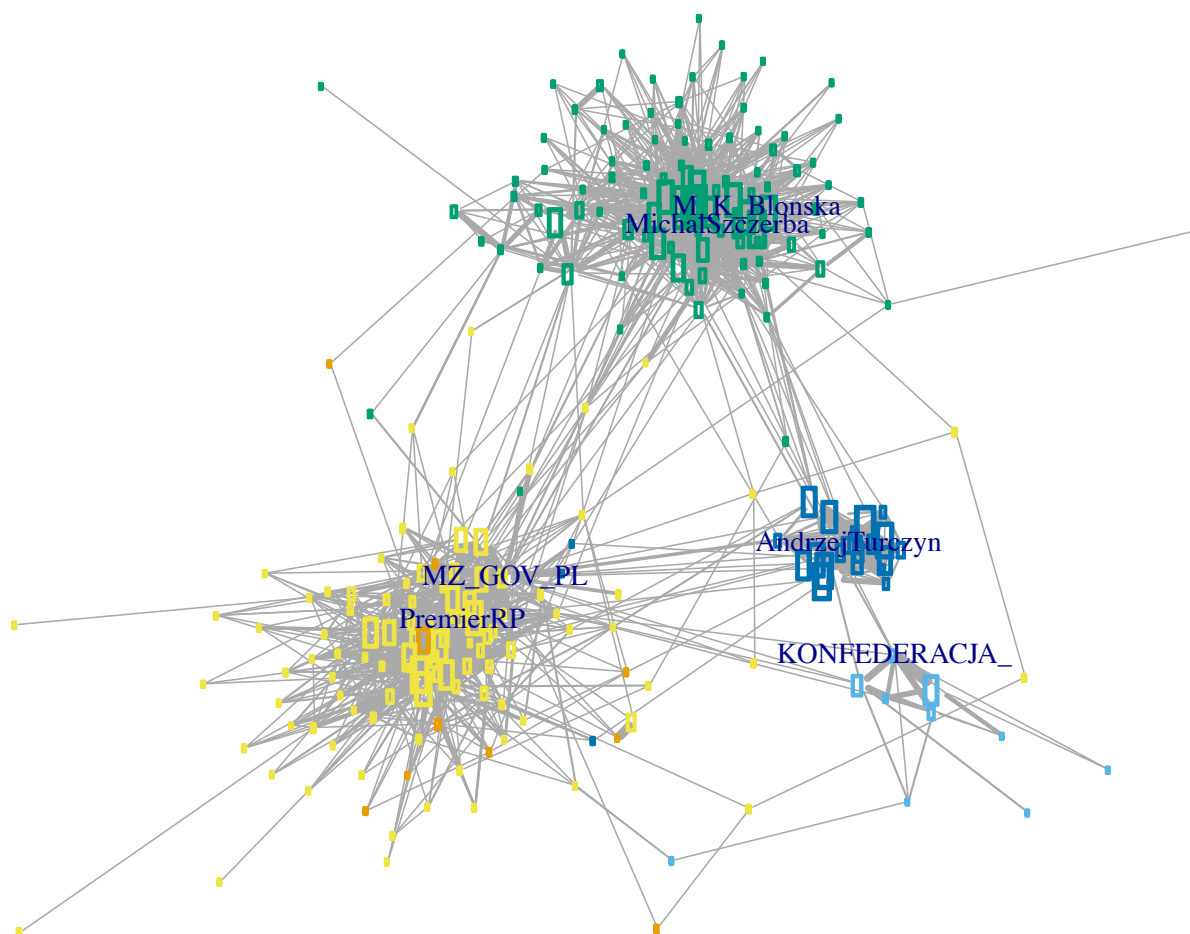
provide information and disinformation about the virus globally at an unprecedented speed, fuelling panic and creating the so-called infodemic. Infodemiology is a new field of research supporting traditional surveillance and health monitoring.

In order to observe the involvement in spreading information about coronavirus, we consider Polish Twitter an information exchange platform and analyse retweet networks. The ideas spreading from person to person in a social network (Christakis, Fowler 2007) can be analysed with phenomena such as social influence, homophily and external field (Jarynowski, et al 2014). Previous studies find that Twitter reflects the structure of the Polish political scene, and it is possible to observe a clear community structure of particular parties (Jarynowski, Wójta-Kempa and Belik 2020A). Due to filter “bubbles” observed on Twitter, public information campaigns can stay within the ruling camp and main opposition communities (Jarynowski, Wójta-Kempa, Belik 2020B).

Propaganda and persuasion techniques are widely used on the Internet easily reaching certain target groups susceptible to conspiracy theories and effectively polarizing societies (Duvanova et al. 2015). These techniques can be used by local politicians as well as by foreign intelligence (Kasprzyk 2019). There are users involved in a discussion on “koronavirus” who are potentially belonging to the group of the so-called “foreign trolls”, promoting content in the buffer area between the ruling party and the mainstream opposition [Fig. 7]. In other studies, they were classified as belonging to the extreme right in the context of elections to the European Parliament (OKO 2019), or far-left in the context of African Swine Fever (Jarynowski, Płatek, Buda and Belik 2020). COVID-19 has also become part of Polish pop culture (Rudolf 2019). A creative cluster of memes is also observed in the Polish twitter network (Jarynowski, Wójta-Kempa and Belik 2020A).

As for the actual COVID-19 epidemic, theories are spreading virtually across the Internet such as: “the virus escaped from a BSL-4 class laboratory near Wuhan”, or “infection can be avoided by secret therapies that the doctor will not tell you about”. They fall on fertile ground, due to the script mechanism of simplifying reality, where more straightforward explanations are more easily absorbed by people (Stróżak 2010). It is especially the case since we don’t know enough about COVID-19, and the recommendations and opinions of authorities such as WHO (World Health Organization), ECDC (European Centre for Disease Prevention and Control) or CDC (Centres for Disease Control and Prevention in the USA) are still revised and updated.

Figure 7. A network of retweets with the Koronawirus hashtag in the Polish language in 28.01-11.03.2020 period (250 most central nodes according to weighted centrality, colouring according to Langevin community detection algorithm (Jarynowski et al. 2014). Yellow- ruling coalition, green - mainstream opposition, dark blue - Protestant group “Idź Pod Prąd”, light blue - Confederation party.



Source: Visualisation own based on Twitter data

However, social platforms in particular and the Internet, in general, cannot be considered sources of information for the whole society. In Poland, we can observe considerable digital exclusion concerning age, education or place of residence. In 2019, only 33.3% of Poles aged 65-74 are regular internet users, compared to 99.3% in the 16-24 age group. 61.1% of people with primary or lower secondary education use the Internet on a regular basis, while among people with an academic degree, this figure rises to 97.5%. In big cities, this rate is as high as 86.3%, while 71.4% of inhabitants of rural areas use the Internet regularly (GUS 2019B). Thus, the underprivileged groups include elderly citizens, people with primary education, and those living in rural areas. On the one hand, these groups have limited access to information produced online, which is sometimes untrue, sensationalist and panic-inducing. On the other hand, their agency in search for information is restricted - traditional media, such as television, radio and newspapers are passive in nature (McKinney et al. 2005) and in case of doubt, their users do not have access to sources to gather information from. The role of information campaigns presented in traditional media is therefore crucial. Their

adequate frequency, structure, level of detail, as well as precise targeting, must be ensured to prevent further disease spread.

POSSIBILITY OF PANIC

We believe it is worth measuring social dynamic change with a particular focus on panic [Fig. 9] using dynamic systems approach (Jarynowski, Paradowski, Buda 2019). Researchers working on panic distinguish its various pathways as:

- cognitive (used in psychological individual person model, i.e. in bipolar disorder (Fava and Morton 2009));
- emotional (used in social psychologist model, i.e. during evacuation [Wąs and Kułakowski 2014]);
- social (used in social models, i.e. moral panic with an essential role of external field and influence of significant others [Strupiechowska 2018]).

Panic during a disease outbreak can be mainly mediated by latent variables such as (Oh et al. 2020):

- fear (e.g. fear of the unknown, or a sense of threat to oneself and loved ones);
- anger (e.g. anger at the bad condition of health care in Poland, mistakes of those in power, or adverse side effects of social distancing).

According to a survey conducted in late March (PAP 2020), there is demographic variation across Poland concerning attitudes towards coronavirus. People over the age of 55 are the most afraid of being infected (~80%), while people aged 18-24 are the least afraid (~40%). Moreover, the inhabitants of larger cities (over 20,000 inhabitants) are more fearful of overcrowded hospitals and inefficient healthcare than those of small towns and villages.

The main problem we will be facing in the next few weeks in Poland is exceeding system capacity for taking care of infected patients in a serious and critical condition. Moreover, social distancing and economic lock-down may affect the integrity of people's needs. According to the bottom levels of Maslov's hierarchy of needs, lack of food (physiological need) or lack of energy supplies (safety need) are objectively very unlikely, as Poland is the 3rd food producer in EU (Eurostat 2020A) and has one of the lowest energy dependence rates in EU (Eurostat 2020B). However, subjectively these basic needs can be affected due to a shortage of other daily-use products or services happening in case of disruption of the supply chain.

Some other preliminary analyses on the Polish population [Fig. 8] suggest that processing of information about COVID-2019 can arise and elicit anxiety (Sorokowski et al. 2020; Karwowski et al. 2020).

Preliminary analysis of Polish media during the outbreak suggests how to control the system (at least *in silico*). Crisis management committee and public relations team should consider two main modifiable variables: information campaigns and spread of information, misinformation and rumors. Two categories of actors can also be distinguished (Statista 2017):

- a majority consisting of passive users seeking information on the Internet (susceptible to information campaigns);
- a minority group comprising active users generating and exchanging content (with various susceptibility to classic information campaigns).

We could recommend unconventional information campaigns for the latter (active) cohort:

- the use of influencers (commonly referred to as “influence agents” (Jarynowski, Wójta-Kempa and Belik 2020A)) to promote information;
- targeting underrepresented cohorts such as youth adults and teenagers;
- content moderation (preventive censorship - deleting posts/comments or blocking accounts).

For the majority of (passive) users, information campaigns should focus mainly on women.

Moreover, in the current epidemic, some forms of stigma (WHO 2020) and moral panic (Guardian 2020) were observed. On the Internet, this is reflected by symbolic violence and hate speech, as illustrated by the following quote from Twitter: “Chinese should be banned from entering our country”.

To sum up, we are going to implement computational social science and digital epidemiology approaches (Jarynowski, Paradowski, Buda 2019) in order to provide urgently needed answers to social dynamics of phenomena such as panic during the outbreak.

COLLECTIVE BEHAVIOUR AND SOCIAL MOVEMENTS

The research on collective behaviour is preoccupied with its emphasis on the centre, central leaders, focal points, and coordination based on centralized communication through mass media or mutually held identities. According to the logic of centrality of informational distribution, central sources of information become major theatres of collective behaviours in modern cities. Centralized information may at the same time facilitate coordination of social protests (Ball 2007) against oppressive political regimes or help to regulate unwanted social phenomena such as the spread of panic during the development of the epidemic. Political legitimacy, or durability of political power, is not always a result of accurate information about the critical situation. Still, it is the product of perceptions not fully matched to material indices. Under strict control of the public information sphere, the horizon of visibility is limited and fo-

cused. Yet, when the source of information is more diversified, local patterns of interpersonal communication become more important, and individuals start to rely on one another to gain news. One of the examples is ‘antiviral masks’. The phenomenon of ‘antiviral mask’ trading could serve as a proxy of panic reactions. Masks price can be traced (Ceneo 2020), and it shows that a huge demand and limited supply caused a massive price surge. Masks and other means of standard hygiene such as disinfectant liquids were almost unavailable on the commodity market from the end of February until the middle of March. Despite the steep losses registered on financial markets since mid-February (WIG index lost 30% in this period), which were caused by disruptions of the supply chain (mainly due to an outbreak in China) and price speculations, stock-prices of manufacturers of medical devices actually appreciated on the Warsaw Stock Exchange. In the investigated period there were shortages of the personal protective equipment for medical personnel around the world, representing a feedback loop with panic and media attention. Moreover, people were extensively buying food with a long expiration date.

Decentralization of information on the local level transforms the dynamics of collective behaviours. On the one hand rumours can simmer in the margins, propagate democratic ideas, but, on the other hand, they may promote unchecked epidemic information and incite risky behaviour. In both cases, political powers seek the antidote to local information propagation processes which operates on the level of the state: accurate and consistent information about the extent and nature of the threat is central to the legitimacy of the state in the face of crisis, it is an indispensable part of prediction and maintenance of the *status quo*.

During the epidemic crisis, the state is very much involved in risk perception and risk management (Brown 2020). Pandemic as an exogenous event which is difficult to predict is increasingly challenging scientific and decision-making authorities (Stańczyk 2019). It generates tensions between population-level common interpretations (stories of suffering individuals), epidemiological analysis, and the interest of the state (Brown 2020).

One of the collective responses of society may be anger towards the state for its potential lack of preparedness, especially if tackling the given epidemic problem is considered to be the responsibility of the state. On an individual level, the anger or disappointment with the reaction of the state to the pandemic can result in an increased need for agency combined with a feeling of responsibility for the local community. Poland is at the forefront of countries characterised with low engagement in public benefit organizations: only 20% of adult Poles are volunteers (Tkaczuk 2007) which is below the European average (i.e. 70% in Sweden (Mondani 2017)). However, the epidemic situation seems to be increasing social engagement of Poles through activities ranging from making protective masks to helping elderly neighbours. Facebook group “Visible Hand” (whose name refers to Polish television programme from the 1960s and 70s which aimed at developing prosocial behaviours among children and teenagers) has now more than 100 000 members offering and seeking help in a variety of forms.

Decisions about a lockdown of a country may lead to negative and positive conse-

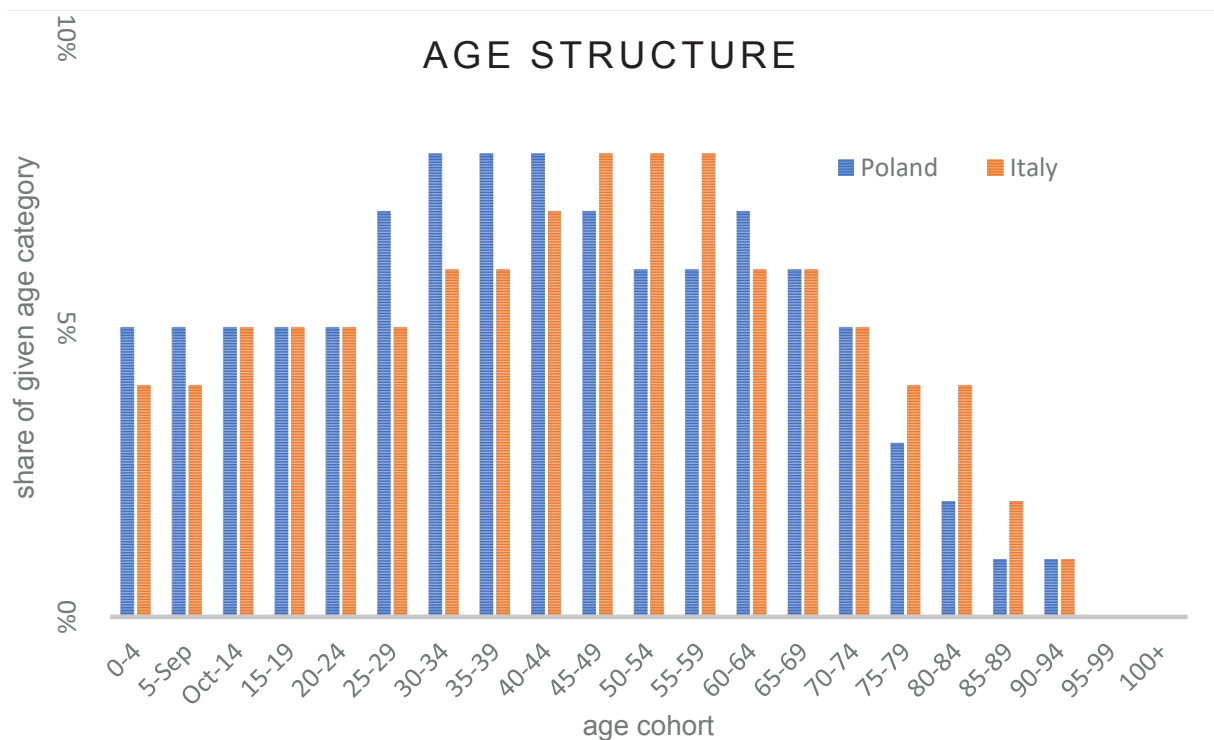
quences resulting from both local and central information spreading. Negative economic effects are not distributed equally and small enterprises seem to be harmed the most. Since the end of March, more than 5000 new companies are suspending their operations daily in Poland (around 15 times more than usual (CEIDG 2020)). Possible consequences of the recession will have short- and long term negative impact on social relationships, educational opportunities, political attitudes, patterns of consumption and leisure (Baranowski 2017). On the other hand, the epidemic crisis offers a number of opportunities for self-organisation of society based on local information and overcoming the threat through alternative initiatives. Most of the social initiatives move to the Internet and have no political overtones, but only assume self-help. Social movements in times of crisis also act differently from protests. The continuous emergency constrains our daily lives, but also challenges our collective creativity. Individual and collective resources are focused on everyday survival. We rely more on governmental efficiency and expert opinions than our own knowledge, however, if crises have the immediate effect of concentrating power, up to and including its militarization, collective engagement may limit the capacity of governments to act merely through force.

DEMOGRAPHY

Demographic structure is an important concern in analysing the spread of the disease in both biological and sociological context, as the age structure is connected with dependent mortality (it increases with age [Worldometer 2020]) and social contact rate is connected with the probability of infection (it differs between societies). It is interesting to analyse how Polish demography could influence spread and perception of COVID-19 in comparison with other nations (i.e. Italy) which are struggling with its outbreak.

For instance, a high death toll in Italy could be a result of overrepresentation of elderly people and a high intensity of physical contact [Fig. 10]. Elderly people with low health literacy and poor digital skills are at risk of violating the outbreak control measures. They should be targeted with information campaigns conducted by family members.

Figure 10. Age pyramid for Poland and Italy.

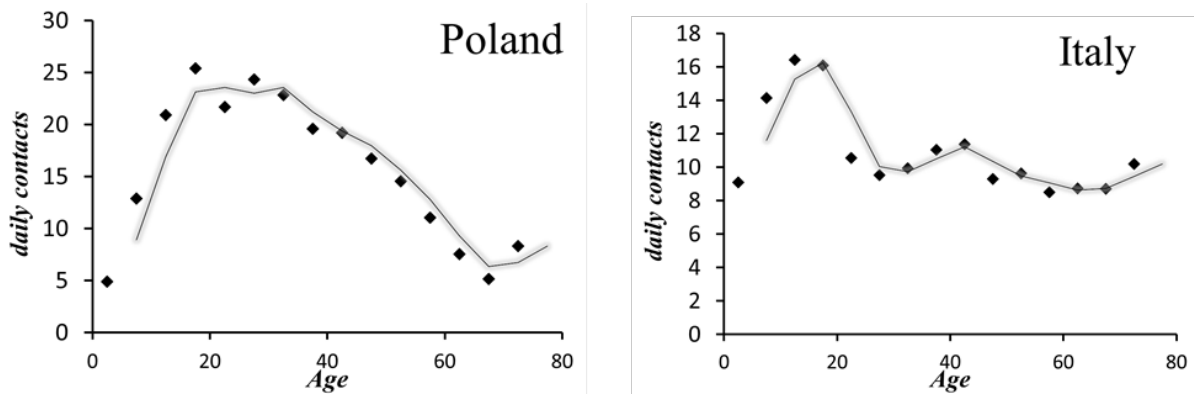


Source: Visualisation own, based on World Bank data (2020)

According to Rowe and Kahn (1997), successful ageing consists of three elements: avoiding disease, maintaining high cognitive and physical function, and continuing engagement with life. While long-term isolation concentrates on protecting the health of citizens, it may lead to a decrease of general life satisfaction due to deterioration of other aspects of life, such as self-development, independence, and social inclusion, especially in the context of the positive correlation between social interactions and life satisfaction in later life (Gow et al. 2007). It may be particularly observable in countries with a high degree of social participation of older adults, such as Italy [Fig. 11]. The fact that in Poland people over 60 are much less sociable outside their families may result not only in a lower death toll in this age group, but also in a smaller likelihood of negative repercussions of mobility restrictions, such as a major change of lifestyle or depression. Therefore, it can be stated that the problem of social exclusion of elderly people in Poland (very limited physical contact patterns with the rest of society apart from their grandchildren (Mossong, et al. 2008)) has, on average, a positive effect. Italian elderly people seem to socialize (in terms of physical contacts) just 50% less than most active teenagers groups. In Poland elderly people have on average 5-fold fewer contacts [Fig. 11].

Polish youths could play a role of superspreaders (Kitsak et al. 2010) due to massive numbers of contacts that they have (even higher than contacts of their Italian peers [Fig. 11]), so closing all educational institutions in the early stage of the epidemic and keeping them closed at least until summer 2020 could be the most cost-effective mitigation strategy.

Figure 11. Age-dependent weekly physical contacts (basing on the Poland and Italy subcomponents of Polymod data, 1000 persons per country).

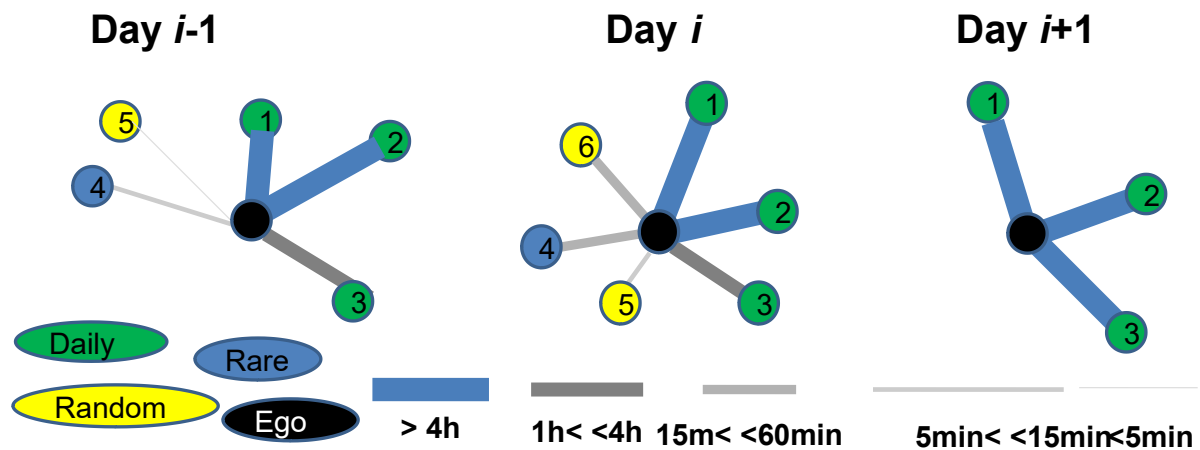


Source: Visualisation own, based on Mossong et al. (2008)

CONTACT AND MOBILITY PATTERNS

Structural properties of Polish contact patterns shown by age-age correlation and clustering (Grabowski, Jarynowski 2016; Jarynowski, Grabowski 2018) have made the landscape more complicated and Social Network Analysis (Jarynowski, Paradowski, Buda 2019) could help in making sense of it. Around 80% of infectivity capacity (contact*contact duration [Fig. 12]) in the Polish population belongs to daily contact (household, working/schooling place, etc.) (Jarynowski and Grabowski 2018).

Figure 12. The real evolving network. Time slices of ego network in the Polish chapter of the POLYMOD study (Mossong et al 2018) with different categories of intensity and loyalty of nodes

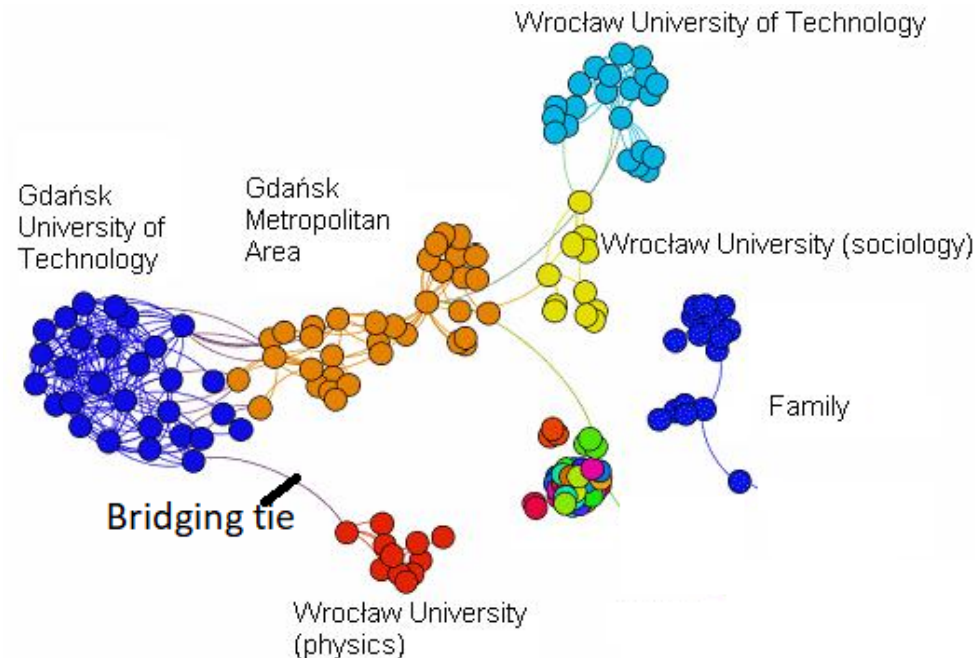


Source: Adopted from Jarynowski (2017)

Poland achieved a reduction of almost 70% in rare and random contacts (Google Mob pl 2020). However, reduction of daily contacts is difficult (workplace contacts were reduced in 30% and, i.e. in Katowice, despite the restrictions, more than 10% of population travel daily for destinations farther than 15km) or impossible (15% of the increase in household contacts) (Google Mob pl 2020). These daily contacts (loyal and

persistent links) form communities and the most efficient strategy would be to eliminate links which serve as ‘bridging ties’ to disconnect giant components into small disconnected networks [Fig. 13].

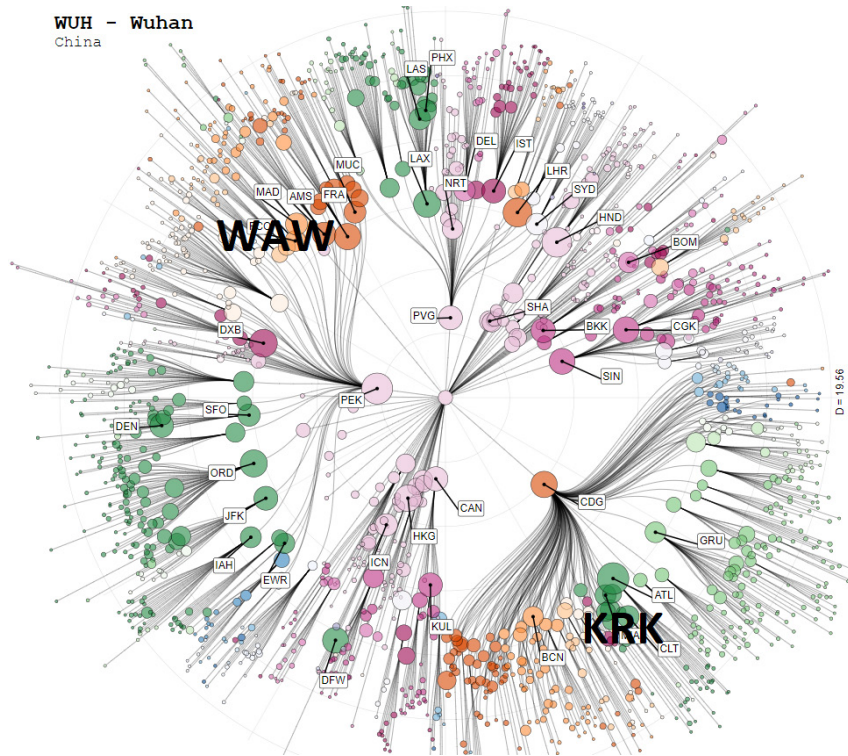
Figure 13. Facebook network (alter-alter) of the first author with annotated communities and possible intervention link (bridging tie).



Source: Adopted from Jarynowski (2017)

Social mobility patterns can have a complicated impact on disease spread. On the one hand, a high number of Poles are often international migrants (with an important share in Northern Italy) and Poland has recently been a popular destination for immigration too, but still far from EU average (Paradowski, et al. 2020; Delhey, et al. 2019). Social distancing could accelerate the process of segregation (Fossett 2006), which is currently ongoing among non-Polish first language users (Paradowski, et al. 2020). On the other hand, Poles are a relatively poor nation and do not travel as frequently as an average European citizen (i.e. average Pole makes 5 fold less touristic trips within EU than Western Europeans, e.g. Germans (Delhey et al. 2019)), so there were much fewer returns from the epicentre of the outbreak in the first (Chinese) and second wave (Italian) of disease spread [Fig. 4].

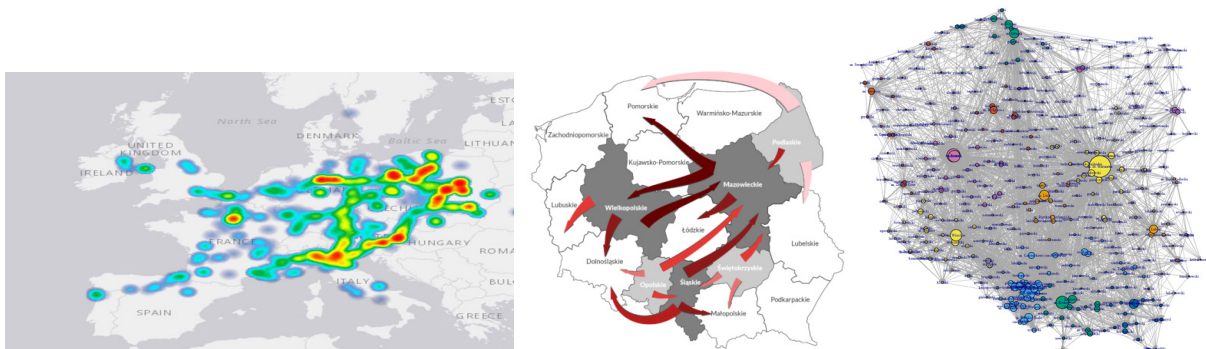
Figure 14. Effective distance (Belik et al. 2011) in terms of airline passengers flows with a starting point in Wuhan.



Source: Adapted from (Brockman 2020)

Such a peripheral location of Poland (among others [Fig. 14]) led to the fact that the first confirmed case of COVID-19 entered by land (in Italian phase [Fig. 4, 14 left]) rather than by air (in Chinese phase [Fig. 4])⁴.

Figure 15. Mobility patterns of Poles. [Left] Mobility of Poles (mainly Polish truck drivers in mid-February). [Center] Mobility of Polish users of web pages with profiled advertising 13-27.03. [Right] Networks between residency and employer address.



Source: [Left] Proxi.cloud (2020), [Center] Selectivv (2020), [Right] Visualisation own, based on GUS data (2019A)

⁴ It was foreseen by the first author of the article already in January 2020 (Interdisciplinary 2020 A).

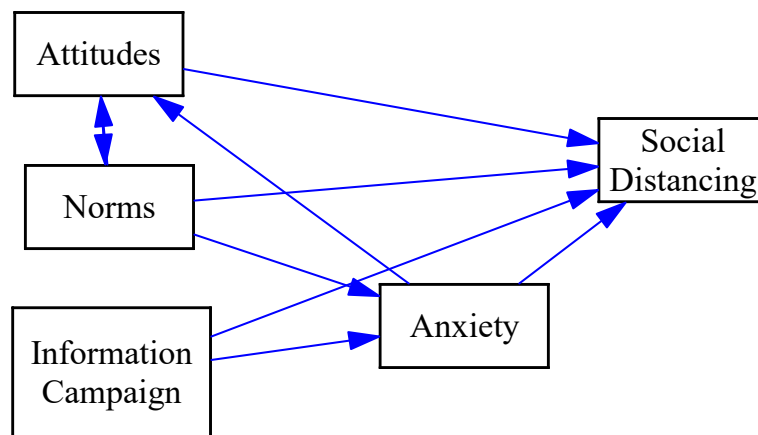
Moreover, internal travel patterns are still far less intensive in Poland than in Western Europe (Pietrzak, et al. 2016). Mobility patterns (air [Fig. 14] and land [Fig. 15]) are correlated with the geographical distribution of first SARS-CoV-2 cases in Poland [Fig. 1]. Since the middle of March mobility trends have been reduced significantly, i.e. in places of recreation and retail by 78%, in workplaces by 36%, in transit stations by 71% (Google mob Pl 2020). It is important to mention that in the same phase of the epidemic in Lombardia, the reductions were only by 10-20% (Google mob Pl 2020).

These multi-country comparisons suggest that Poland could be coping with the epidemic somewhat better than Italy, at least from death tolls perspective.

CULTURALLY RELATED NORMS AND ATTITUDES

The COVID-19 outbreak offers an opportunity to make some proposals for comparative analysis of epidemic social outcomes in relation to social attitudes and preferred social values. Social norms are rules that prescribe what people should and should not do given their social surroundings. People are instructed by norms that tell them to keep their promises, or avoid deceiving other people. But how do norms work in a sudden change of social circumstances?

Figure 16. Conceptual Model of explanatory variables influencing Social Distancing compliance intended for SEM.



Source: Adapted from (Zhang X et al. 2020) and generated in Vensim

Society can be characterized by its specific normative responses to the crisis. The most interesting responses may appear in the context of:

- normative patterns of physical contact;
- adaptation of social distancing rules [Fig. 16].

Table 1. Simplified characteristic norms and attitudes of societies

attitude	Italy	China	Iran	South Korea	Poland
Autonomy index. Obedience vs independence. % of high and medium obedience in bracket (World Value Survey 2005)	low (21%)	high (70%)	medium (53%)	very high (75%)	medium (44%)
Trust in government and civil services. % of answers: "A great deal" and "quite a lot" (World Value Survey 2005)	high (41%)	very high (75%)	medium (30%)	high (63%)	low (16%)
Importance of health. % of answers: "important" and "very important" (World Value Survey 2005)	very high (97%)	medium (88%)	high (94%)	very high (99%)	medium (88%)
Attitude towards society. % of answers: "important" and "very important" (World Value Survey 2005)	collective (43%)	collective (31%)	collective (33%)	semi collective (18%)	semi individualistic (12%)
out-of home social activities	very intensive	intensive	intensive	moderate	moderate

Source: Design own, based on various sources as described⁵

Autonomy: the norm of autonomy is a rule which states to what extent Polish citizens are willing to comply with the norms of the society in which they live. Relative independent or anticonformists could have an impact on global opinion in whole society (Nowak et al. 1990; Nyczka, Sznajd-Weron 2013). Polish citizens seem to obey the rules if required [Tab. 1]. In comparison with Italy, Polish society has 3-fold less people who characterize themselves as fully independent. Italians are more likely (or at least they declare so) to ignore rules and refuse to sacrifice their social life against their will. However, Chinese and Korean are much more obedient than European. Asian are more likely to follow restrictions if asked. This shows that Polish citizens can be expected to follow top-down imposed rules in better compliance than Italians, but far away less adherence than Asian.

Out-of home social activities: People’s lifestyle could have an impact on physical contacts and possible adaptation to social distancing rules [Tab. 1]. Polish citizens show low engagement in social activities (Tkaczuk 2006) and low rates of attendance in out-of-home services (less than 15% of the adult population regularly eat out of home [Gutkowska and Piekut 2017]). What is more, expenditure on hotels and restaurants has two times lower share in the household budget than EU average (Wołoszczyn et al. 2018), and tourism rates in Poland are low (Delhey et al. 2019). Relatively low rates of participation in a voluntary organization (Tkaczuk 2006) and lack of habits of

⁵ Disclaimer - Some measurements are outdated and in some cases levels of variables are quite subjective due to compatibility problems.

outdoor social activities and low importance of social activities for the Polish society (which is in this case similar to South Korea) could inhibit SARS-CoV-2 spread.

Trust: Polish society is characterized by a low trust (Mamzer 2008) in people and especially in public institutions [Tab. 1], probably mainly due to experiences in the post-war communist period. For instance, people who do not trust conventional medical treatment and believe in conspiracy theories are advised by Polish anti-vaccination guru to inject bleach to kill the virus (Jarynowski, Wójta-Kempa and Belik 2020A). However, in the situation of crisis people are more and more likely to accept and trust the government as they seek stability (which was already observed in Poland [Sorkowski et al. 2020]).

Importance of health: The fact that most of the Italian society appreciates health itself as a value seems to be a turning point in communication strategy in Italy [Tab. 1]. In Poland it would probably not be as effective due to much lower declarative importance of health.

Attitude towards society: Most Poles will probably not be willing to get involved in action for the common good due to their semi-individualistic (selfish) approach [Tab. 1]. All other compared societies are much more likely to cooperate for the common good. For example, there is a low interest in using surgical or cotton masks (to protect others) in Poland and most mask users prefer FFP2 or FFP3 products with a better self-protecting profile (Jarynowski, Wójta-Kempa and Belik 2020A). In a conflict between private (protect myself) and public goals (protect others), the former are winning in Poland.

Also, Polish society shares a collective memory of over 40 years of communism and Soviet occupation. ‘Empty shelves’ metaphor of crisis constitutes an element of collective memory, which is not the case for Western European societies. Polish society was exposed to a few crises such as martial law in 1981 and systemic transformation in 1989, so in the collective perspective, coronavirus may be yet another crisis that the society has to overcome (actively) or endure (passively).

CONCLUSIONS AND FUTURE RESEARCH DIRECTIONS

The SARS-Cov-2 will probably cause a significant epidemic outbreak in Poland soon and its elimination might not be possible for at least a few months. The need for a rapid response requires different scientific engagement, which should be based on a somewhat simplified and quick analysis. At the same time, complex and deep approach with testing, validation and replicability should be conducted later on.

Polish context of demography, social mobility and attitudes: The main problem we will be facing in the next few weeks in Poland is exceeding system capacity for taking care of infected patients in a serious and critical condition. Characteristic features of Polish society in terms of autonomy index and out-of-home activities [Tab. 1], age-structure [Fig. 10], mobility [Fig. 15] and physical contacting patterns [Fig. 7] are probably going to inhibit the spread of the disease as well as the death toll (at least in comparison with Italy). Surprisingly, negative characteristics of Polish society, such as the social exclusion of elderly, lack of horizontal mobility and high responses to neg-

ative stimuli (Rosinski et al. 2019) together with high obedience are rather helping in managing public health during the COVID-19 crisis.

Risk perception and panic: Public anxiety or fear (Oh et al. 2020) could lead to massive purchasing of food and protective hygienic supplies, including toilet paper. Some of the Western European societies are now witnessing empty shelves for the first time since WW2. Still, this phenomenon is a part of Polish historical/collective memory (Gołka 2009) of the Polish People's Republic. Perception bias, time-framing, coherence of information with the value could lead to a varying degree of (mis-)understanding of risk (Brown 2020). Risk perception was very low in Poland until school closure and pandemic declaration on March 11, 2020, in both the absolute measure [Fig. 2] as well as in comparison to other European countries (Widzialni 2020). In the last days of March, the awareness of basic knowledge is saturated and people are mostly waiting for news and updates. Panic can occur when people overestimate a threat or do not understand it [Fig. 9]. The more often the information about SARS-CoV-2 is repeated, the more important it will be considered.

Communication, Information and Sociolinguistics: Public understanding of 'social distancing' is connected with individual actions that can affect population health (Long 2020). Information and awareness spread patterns could be measured [Fig. 2] and might explain compliance with the measures (Jarynowski, Wojta-Kempa and Belik 2020A).

Social engineering and techniques from other areas of social sciences have already started to be applied by governments and companies. Perhaps one of the reasons China has been so successful in controlling the spread of the infection is social control. Social media like Wechat (Wang et al. 2020; Zhang et al. 2020) and all information-related aspects of life are subject to surveillance by algorithms (e.g. Social Credit). Social media can provide information and misinformation on infectious diseases (Lusawa et al. 2017) around the world – including Poland – at unprecedented speeds. Platforms committed themselves to fight the dissemination of false information about the epidemic and content that may be false. Facebook, Twitter, and Youtube added appropriate banners, and are currently either removing particular content or blocking whole accounts. It is worth to raise the ethical role of media platforms that have technical capabilities to moderate the discourse on the infection (Baranowki and Luczys 2015). This applies to traditional journalism too, which in the pursuit of luring the reader fuels sensational content (Wolska-Zogata and Wójta-Kempa 2015). In social media, one can think about preventative censorship, primarily since the new particular act would provide such an opportunity. There are many unanswered questions, such as how long the epidemic will take to finish. How can we expect the Polish public to make informed decisions about their health and social behaviours in the absence of such information? Is more information always better? Let us consider a protective mask. Surgery mask can protect the user from droplets containing the virus only for an experienced person with trained habits. There are plenty of epidemic projections for the future for Poland (Interdisciplinary 2020C). However, some effects of social paradoxes of modelled intervention have been noticed so researchers must be aware of them (self-fulfilling prophecy or self-defeating prophecy).

Collective behaviour: Although COVID-19 might cause more disruption due to panic reactions that it entails rather than due to its actual epidemic risk, an epidemic might pose a serious challenge to the Polish healthcare system due to, e.g. lack of staff and shortage of quick diagnostic tests or personal protective equipment. However, surgical masks decrease the probability of spreading the infection. Thus, if people need to use masks, there will be no masks available on the market (while there are deficits for medical staff already). Under conditions of a market-consumer society, private goals of individuals come into conflict with responsibility for the whole society or community (Baranowski 2013). Let us also consider surveillance and monitoring analysing systems to illustrate the mobilisation of social movements (Interdisciplinary 2020B). At present, thanks to enthusiasts, we have a few straightforward analyses for Poland (e.g. aggregate data analysis and curve-fitting model [Rogalski 2020]), or modelling (e.g. [Mostowy 2020; Gonczrek and Wójcik 2020; Jasiński 2020; Interdisciplinary 2020C; Bock et al. 2020]) and we can hope for the creation of new ones during the governmental hackathon (Hackathon 2020). However, state bodies with a dedicated budget and EU funds and focal centres such as National Institute of Public Health (NIZP-PZH), or the Department of Analysis of the Ministry of Health and National Research Institutes did not provide any quantitative analysis or predictions until the end of March 2020. As we see in this example, society (mainly led by NGOs and small companies) is taking responsibility in areas where dedicated institutions are too weak to act appropriately.

Nevertheless, there are also bright sides to the outbreak. For instance, according to Andrzej Fal, president of Polish Public Health Association: “COVID-19 also has a positive aspect, which is the dissemination of knowledge of the really basic principles of prevention of infectious diseases among Poles” (Rynek Zdrowia 2020).

We also tried to show that the compilation of many phenomena needs to be explained to understand the causes and consequences of the outbreak of epidemics in every country. Practical activity within public health must be highly supported by such disciplines like epidemiology, sociology, demography or culture studies etc. Public health is primarily this kind of knowledge and practice which needs interdisciplinary cooperation with many partners to overcome the spread of SARS-CoV-2. The words of late Wojciech Sitek, mentor of several generations of sociologists in Wrocław, seem to be particularly actual nowadays: “Sociology and especially computational social science is a public service for developing better societies” (Sitek 2007). We are now witnessing the moment for a particular mobilisation of all academics to work towards an effective response to the pandemic, and we believe sociology should also be a part of it.

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MANAGING THE HEALTH AND SAFETY LEGAL AND PSYCHOLOGICAL RAMIFICATIONS OF COVID-19: AN AUSTRALIAN MULTIDISCIPLINARY PERSPECTIVE

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ABSTRACT: COVID-19 represents unprecedented challenges for the entire community. Much of Australia's commercial sector has voluntarily deployed strategies to support social distancing ahead of any lock downs. Businesses are working to safely maintain operations and a productive workforce throughout social isolation/distancing for an unknown duration. Yet uncertainty, ambiguity and radical change are breeding grounds for anxiety, stress and helplessness. Conditions that contradict safe mental health practices for work. The Australian perspective includes the cumulative stressors of the bushfires, torrential rains and floods. Each of these stressors was an environmental stressor. But people and businesses knew what to do. The newest cumulative stressor is remote work becoming the norm. Workplaces have often had a mediating effect as a point of social interaction. Legally mandated safe spaces that people could connect and be productive within. There is much research on the connection between

social isolation and loneliness. Organisations need to support workers in maintaining social connections, team cohesion and productivity throughout these times. This paper will explore the health and safety legal obligations that apply in this context and outline a practical framework for organisations to contribute to and reinforce a positive state of mental health during the mass remote work experiment.

KEYWORDS: mental health, health and safety law, remote working, COVID-19, domestic violence

BUSINESS AS USUAL (BAU)

Under Australian health and safety laws, organisations /employers (with the duty holder referred to in most jurisdictions as a person conducting a business or undertaking) are subject to a primary duty of care that requires them to ensure the health and safety of workers so far as is reasonably practicable and to ensure that they do not put other persons at risk in the course of their undertakings. Amongst other things, that requires organisations to provide and maintain safe systems of work and safe working environments. Practically discharging those duties requires a risk management approach, to eliminate hazards and risks where reasonably practicable and then to minimise those risks in accordance with the hierarchy of controls. Determining what is reasonably practicable in the circumstances involves proactively identifying, assessing and controlling reasonably foreseeable hazards and risks.

Health and safety under this framework includes both physical and mental health and safety. Relevantly, the definition of health includes psychological health as well as physical health.

Importantly, the duties apply wherever a worker goes while at work and are not limited to the traditional workplace setting.

The statutory health and safety legal framework also recognises that individuals and not just organisations play an important role in securing positive health and safety outcomes during the course of work and as such place specific personal obligations on officers (senior leaders of the organisations), workers and other persons.

Officers are required to exercise due diligence in ensuring the organisations for which they are officers comply with their obligations under the laws. Due diligence requires officers to engage in a number of proactive steps for health and safety corporate governance under 6 elements, one of which is a requirement to ensure there are appropriate resources and processes in place at their organisation for eliminating or minimising health and safety risks.

Workers and other persons are required to take reasonable care for their own health and safety and not adversely affect the health and safety of others while at work. They are also expected to follow the reasonable health and safety instructions of their organisations.

Liability attracts under Australian health and safety laws where these above duties are not met. Prosecutions by health and safety regulators typically occur in the context of failures to adopt the mandatory risk management approach. The offences are

criminal in nature and are categorised by seriousness with the most seriousness category one offences carrying penalties of AUD 3,000,000 for organisations, AUD 600,000 and/or 5 years imprisonment for officers and AUD 300,000 and/or 5 years imprisonment for workers and other persons.

STRESS IS A REASONABLY FORESEEABLE EVENT IN MANY WORKPLACES

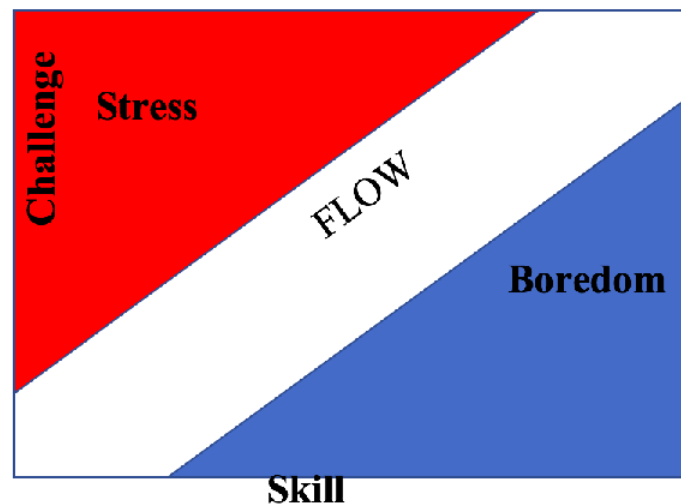
There is an increasing expectation from regulators that organisations take psychological health seriously and put in place a systematic approach to managing it in their operations. In 2018, Safe Work Australia published national guidance material on work-related psychological health and safety. Commentators welcomed the development but wondered why this issue was relegated to the level of guidance material rather than Code of Practice as is the usual level of guidance issued on specific hazards and risks (such as managing workplace facilities, working with plant or working with electricity).

Information from Safe Work Australia indicates that more than 90% of psychological injuries are due to stress. Be that from customer interactions for retail staff, to interactions within the office between colleagues or management processes. This stress causes negative responses for people which either aggravate or cause mental illnesses, the most common being Adjustment Disorder, not the often mislabelled Anxiety or Depression. Given how common stress is indicated as a component in the development of an injury it is easy to see it as reasonably foreseeable, i.e., it is not a rare occurrence that cannot be predicted or mitigated. Below we will explore some of the most widely accepted theories of stress and how workplaces can mitigate the detrimental outcomes of placing an employee into a stressed state when operating in business as usual times.

STRESS, ASSUMING FLOW MODEL DESCRIPTION, IS MITIGATED BY TRAINING

Csikszentmihalyi's work on Flow (1975, 1991, 1996, 1997) has been taken up by many workplaces as part of the positive psychology underpinning prevalent Wellness and Welfare packages. The first edition of this work was and is most relevant to workplaces today as it does not combine his later work on autotelic personalities with Flow. For this reason, this section will draw on the first edition version that included micro and macro flow and did not include any personality concepts. Flow is essentially that state a person enters when their consciousness experiences partial automaticity of their body and thinking system, when things seem to just click, or be in the zone, or time flies when you're having fun.

Figure 1. Diagram of Flow



Source: based on the data and information within Csikszentmihalyi's work on Flow (1975, 1991, 1996, 1997)

When Csikszentmihalyi first wrote about the topic he conducted research with various “masters” or “experts”. He interviewed chess grand masters to rock climbers. People who excelled at both physical and intellectual pursuits. What was astonishing was the similarity of their descriptions of this experiential state. There are a lot of psychological components described in Flow. Firstly, that it must be experienced. It does not happen outside of experience: rather, it is itself a state of experience, much like intoxication is experienced not just a physiological state.

The second experiential component is the experience of things just clicking, from chess masters describing how the next move just comes to them to rock climbers noticing how their hand just seems to find the right hold. This partial dissociation is similar to that achieved through certain mindfulness practices such as in Mindfulness Based Cognitive Therapy (MBCT) or Acceptance and Commitment Therapy (ACT). This has a huge advantage to businesses as it means workers are working at their peak effectiveness.

The third component that is oft reported is the temporal distortion: that time flies when you are having fun. Again, this is a partial dissociation similar to that achieved through certain mindfulness practices.

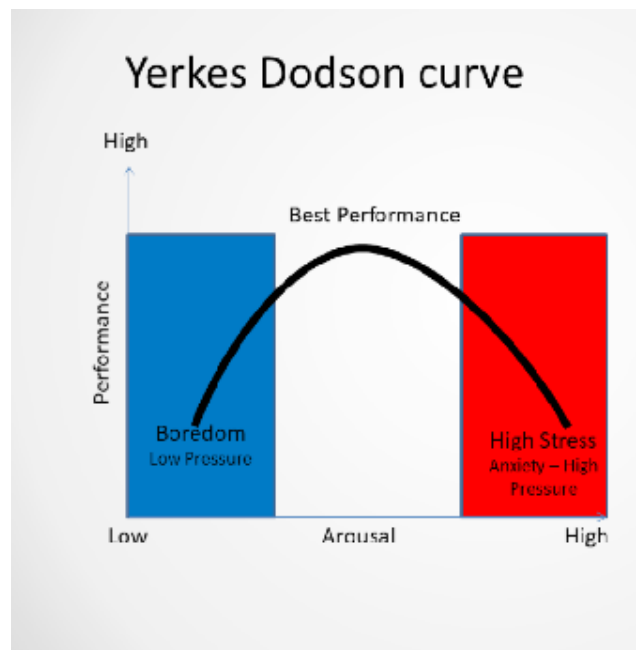
The way that Flow is achieved is by having the person's skill in balance with the demand of the task. When these are in balance the person, according to the theory, enters a state of Flow. When the person's skill exceeds the task at hand they instead enter a state of boredom. When the task demand exceeds the skill of the person then they enter a state of stress.

Using this theory in the context of work, if a business is able to balance the skill of the person with the demand of the task, they will enter Flow. If the task is beyond them, they will enter stress. This gives leaders a simple business lever to pull on, to train staff for the tasks they are required to do.

STRESS, ASSUMING YERKES-DODSON AROUSAL CURVE, IS MITIGATED BY CALMING DOWN OR UP

Yerkes and Dodson (1908) over 100 years ago documented the relationship between arousal and performance. Language since then has moved on and now we tend to use arousal as a shorthand for sexual arousal, however, this did not relate to that specific form of arousal alone. In more modern times we see the terms “eustress” and “distress” being used. Eustress being the good reaction to “stress” rather than “arousal” and distress being a negative reaction to “stress” rather than “arousal”. This is essentially a rebranding of this original theory, where eustress means optimal arousal, and distress means over arousal, and boredom means under arousal.

Figure 2. Yerkes Dodson Arousal Curve



Source: based on the information within Yerkes and Dodson (1908)

In this theory of stress the person needs to achieve the optimal arousal state by stimulation, rather than by demand of the task. Anything that is a sensation can be a source of stimulation. This is where sensory modulation becomes important. In school we were all taught about the five senses. Taste, touch, sound, smell, sight, and hearing. However, there are actually over 25 different senses. Sorry to those who believe in ESP it's not the sixth sense it's more like the 28th sense. Some of the senses you were not taught at school include heat perception, cold perception, sharp pain, dull pain and slow aching pain. These are not types of touch, they actually have different nerves in the body, travel up different circuits in the spine and go to different parts of the brain. It gives some explanation as to why people who are in pain (especially if it's two types of pain) are already aroused and tip into stress more easily. The two biggest additional senses that are important to be aware of and modulate for are Vestibular and Proprioceptive sensations.

Vestibular sensations come from your inner ear. It's how your body knows your head is up not down. Spin too many times on a merry go round and you get overstimulated in your vestibular system and often feel nauseous or vomit. Proprioception is from your joints and tells your brain where your body is in time and space without having to look (close your eyes and move your hand around, you still know where your hand is, but it isn't being sensed by any of your five traditional senses).

Combining the sensory knowledge and the Yerkes-Dodson arousal curve is important to work design. If a person has the same stimulation over and over they become under aroused and under perform. This is why some variation of work demands is important. Yet get it wrong and over stimulate the person by having them change too much too often and they become over aroused and tip into stress reactions. This really is a goldilocks type task (not too hot not too cold, getting it just right) for organisations.

STRESS, ASSUMING SENSORY MODULATION MODELS, IS MITIGATED BY REASONABLE ACCOMMODATION

Sensory modulation is the term applied to giving the neural system the sensations it is built to handle. Where Yerkes-Dodson is about the outside design of the stimulation, sensory modulation is about the unique sensory tolerance profile that each person has and where for some people the design needs to change radically. Imagine two workers in the same sensory environment. If all that was at play here was the Yerkes-Dodson curve then the ideal sensory environment could be assessed and built to maximise optimal arousal. If only it were that simple. Due to neural plasticity, unless those two people had exactly the same journey through their life with the same genetic code, they will have differently wired sensory systems.

One might have loved the swing, snow skiing and waterslides, developing their vestibular system while the other might have disliked those activities and thereby under developing their vestibular system. Now as adults they will have radically different reaction to the same level of vestibular stimulation as they have different neural systems processing the input. Add to this various medical and mental conditions that further alter sensory perception.

This brings about a third lever for business and that is reasonable accommodation for employees. The business must, where feasible, make reasonable accommodations for sensory modulation.

STRESS, ASSUMING SOCIAL INTERACTION MODELS, IS MITIGATED BY GOOD PERSONAL BOUNDARIES CODIFIED IN OFFICE POLICIES AND PROCEDURES

Much of daily stress comes from interacting with other people. Bullying and harassment claims stem from interactions with others. Many traumas are caused by other people, not natural disasters or pandemics. Inappropriate conduct, such as hazing rituals perpetrated against apprentices, health professionals engaging in sexual activity with patients, or lawyers using money held in trust for gambling debts are also about

boundary violations. Boundaries help people define what is and is not acceptable. They even change constructs like consent from opt in to opt out, i.e., if two people are friends vs romantically linked what is considered an opt out vs opt in consent can be very different.

Before COVID-19 most people were not working from home all of the time. For most, there was a clear boundary between work and home. However, with digital technologies such as having email on our phones we began to blur this boundary. Now that people are working from home en masse the boundaries are shifting even further and faster than before. Is it now acceptable to come to “work” in a daggy old tracksuit rather than formal business suite? If you are using video conferencing like zoom, skype or facetime is it ok if just the top half is dressed in office attire as that is all the other person sees? Do the normal office policies and procedures apply given you are not in the normal office? For those who did not work from home these were not even questions. The standard office policies and procedures governed this and thereby reduced the possible stress.

**STRESS, ASSUMING FORDISM ALIENATION MODELS, IS MITIGATED BY
ALIGNING THE PERSON’S ROLE TO THE ORGANISATION’S PURPOSE,
VISION, VALUES AND VIRTUES**

Henry Ford invented the motorised or moving production line: a huge leap forward in how products could be manufactured. But this also produced a psychological consequence of alienation. People might well ask what alienation is and why does it matter? In a moving production line a person only has one task that they repeat over and over. They may press a button, or pull a lever, or twist a dial. That could be it. They only have input into that one tiny part of the production process. They may not know how to do the task at a different station along the production line. Let alone see or know how their tiny part actually makes a car, fridge or any other product on the production line. Essentially at that level it may not seem to matter and not be a source of stress. However, this disconnect is distressing to the person.

At 24 hours old the baby can tell the difference between when it touches itself or someone else touches it. That marks the start of the mind’s recognition of there is a world outside of me, a *me* and *not me* categorisation. By six months old the baby responds differently to things that are objects and things that are people. The baby will attempt to mimic behaviours it sees other people carry out, but not activities it sees objects carry out. This makes a second distinction in the baby’s mind for the “not me” category to split into *not me and not like me* vs *not me and like me*. These building blocks of psychology become the basis for the person to have a sense of self-efficacy, a sense that “*if I try, I can do it*”. Self-efficacy has been shown through a multitude of research and meta-analyses over more than 50 years to be the one most important psychological factor. What alienation does is it breaks the feedback loop for self-efficacy. It prevents the person from observing what they tried to do actually achieved anything. This changes the “*if I try, I can do it*” to “*if I try, I don’t know if I did it or not???*”

Understanding this aspect of business and the stress it can cause workers gives

business a lever of linking the personal effort to the outcome. This often occurs in business by aligning the business vision, via the virtues or values of the business, to the worker's role, and their daily tasks. It is why effective leaders use this lever in staff meetings or gatherings to talk about how the efforts and actions of staff at all levels matter and contribute to the outcome.

THIS GIVES BAU FIVE LEVERS TRAINING, CALMING, ACCOMMODATION, PROCEDURES, ALIGNMENT

When working within the organisation as a usual environment an effective leader manages staff stress levels by using the five different levers. These can be effectively managed, delegated and monitored within the business to determine their effectiveness and refinement. In so doing the risk of stress becoming a negative impact on the business is reduced. Likewise, the benefit from having staff that are entering Flow, optimally aroused, sensorially modulated, having boundaries, and aligned on how their tasks contribute to the business vision and outcomes maximises staff productivity. It is a win/win for both the staff and the business.

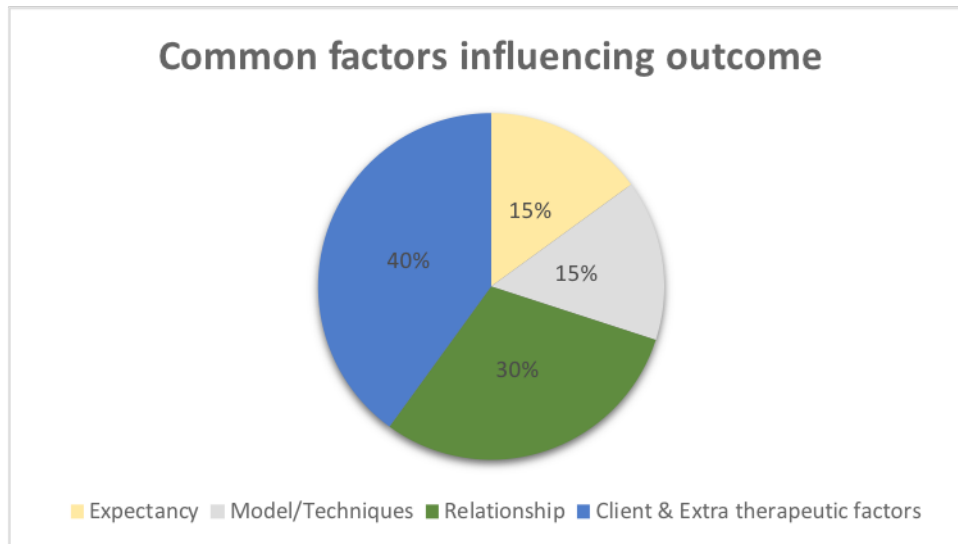
THE FIVE LEVERS ARE GREASED BY RAPPORT

Leading in times of crisis is in some ways similar to providing therapy to patients. One party is stressed or distressed and the other is trying to help the stressed party function better. If that position is accepted, then it is valuable to consider the literature from therapy that indicates what works. From the outside, the world of mental health would seem to be a proverbial tower of babel situation filled with multiple techniques, jargon and divisions. There is ACT, BT, CBT, CT, MBCT, MBSR, if you prefer acronyms or analytic psychotherapy, gestalt, psychodynamic therapy, process psychology, psychoanalysis, somatic psychotherapy, to name a few. All these various techniques have produced vast volumes of research on their effectiveness and the specific techniques within the style of therapy. What becomes interesting is how much these techniques actually impact the outcome of therapy, and can thereby be applied to the current situation and its leadership needs.

To many disgruntled recipients in their various technique bootcamps the answer from research over fifty years has been resoundingly that the technique is a minor component in the effectiveness of outcome. Much of the literature puts the actual impact of technique at around 15% of the actual outcome (e.g., Miller. et. al. 1997). That means 85% has nothing to do with the technique chosen! That 85% is comprised mostly, around 40%, of the client factors; the experiences, context and resources the person themselves brings to the situation. This is all the aspects of the person that they bring into the situation when they are greeted, the idea that you have to take the worker as you find them (consider the eggshell psyche rule in workers compensation). It is unique to that individual at that time. In the sections above, discussing stress, this is aspects like the personal boundaries, sensory modulation and reasonable accommodations required, and of course the current context of the COVID-19 pandemic.

The other significant factor, around 30%, is the relationship between the therapist and the patient. Expectancy is the other main factor, that is, what the patient expects to gain from the process and how the therapist communicates, understands and meets that expectancy.

Figure 3. Factors that Effect Outcomes



Source: based on the information within Miller et al. (1997).

Applying this knowledge to leadership in Business With COVID (**BWC**) gives clear priorities to how the leader needs to lead.

The largest aspect that the leader can control (at best) or influence (at worst) is the relationship factors. This is rapport. Establishing rapport early, revisiting it often, and nurturing it through the journey. Rapport can be conceptualised as coming from either a shallow level or a deep level.

The shallow level style of rapport is the one that is often used in sales, like a used car sales yard. The salesperson may ask about some trivial aspect of your world, be it where you live, what sports team you follow, or some upcoming holiday event. Once this is known then the person will make commentary suggesting some shared experience with you. This in turn tricks your mind into thinking that the person is part of your in-group. This social psychology trick then is leveraged as people will naturally tend to make a choice that is consistent with someone else they see as part of their in-group. It's why peer pressure works. And like magic the salesperson would buy that car too and the next thing you know you have bought the car. The shallow rapport worked for that transactional moment. Deep rapport is different.

Deep rapport is not based on the shallow level of events, sports teams or a holiday. It is based on one of the universal seven emotions discovered by Ekman. Ekman's research showed that there are seven universal emotions experienced and identified by all the people of the world; sad, happy, anger, fear, disgust, contempt and surprise. Deep rapport uses the connection and similarity at this level between the two people. It draws on the leader or therapist's ability to help move the person through the

Maslow's hierarchy of needs level of love and belonging. Belonging itself can be conceptualised as having hierarchical layers (where 1 is the lowest foundation layer needed to progress) of:

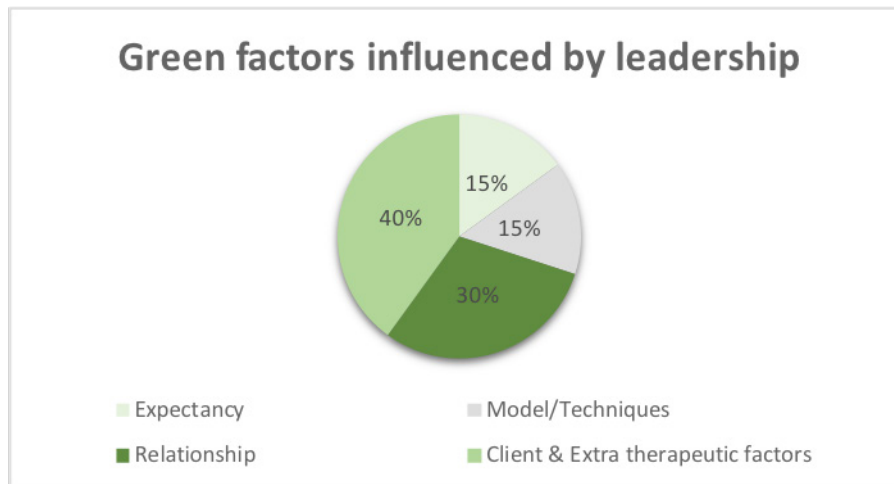
1. **Acknowledgement:** you exist and I as another person see and hear you.
2. **Recognition:** you are different to me and have a right to have a different experience to me.
3. **Validation:** your experience is valid and not a concoction, fabrication or gross exaggeration.
4. **Alignment:** we can work together on a task that is beneficial to both of us.
5. **Acceptance:** you are part of the group and not merely needed to achieve the aligned outcome but wanted.

By acknowledging that the person exists and that they have one of the universal emotions the leader has already progressed the person through the first two layers. When the leader acknowledges that they too have had that emotion, or are having that emotion, they are validating the other person. That simple process has already moved the person from feeling isolated and disconnected to feeling that they belong and are ready to begin to align. Using this approach means that the leader can draw on the 30% of the relationship factors to bring about an effective outcome.

Clear, concise and consistent communication is imperative. It is the way that the leader can set and manage the expectancy of staff, clients and the community. Doing that alone gets you 15% of the outcome. The expectancy in these situations, that is times of crisis management, has been well established. Consultative processes are disadvantageous as they increase ambiguity and uncertainty. It is an interesting challenge given there are specific legal obligations for worker consultation on health and safety matters under Australian laws that will still apply. Command and control communication, directive yet civil is what is expected by the community. It does not need further research to be understood, it is already understood.

Combining deep rapport and managing the expectancy through clear, concise and consistent communication will activate 45% of the effective factors. Understanding the inherent client factors of sensory modulation, arousal needs, boundaries and their personal context activates the other 40%. By taking these approaches the leader is able to activate 85% of the factors that will create a favourable outcome for the person, and by achieving that the business.

Figure 4. Factors Positively Effected by Leadership Choices



Source: based on the information within Miller et al. (1997).

IS THERE A PSYCHOLOGICAL EQUIVALENT OF PERSONAL PROTECTIVE EQUIPMENT (PPE)?

Resilience is your and your staff's PPE in these times. Resilience is often spoken about, yet it is important to understand it is a twofold concept. This is because from a clinical perspective resilience is the umbrella term for the factors, yes plural, that impact on both if a person is likely to get a mental illness, predisposing, and that also contribute to their recovery, perpetuating. They are the same ten factors:

- (i) **Boundaries:** ability to set and maintain personal rules of engagement and respect others.
- (ii) **Determination/grit:** ability to complete tasks despite obstacles.
- (iii) **Emotional Self-efficacy:** ability to keep emotions under control and change them as needed.
- (iv) **General self-efficacy:** having confidence that the person can do tasks.
- (v) **Help-seeking self-efficacy:** confidence to seek out and ask for help when needed.
- (vi) **Learning self-efficacy:** confidence to learn new things as needed.
- (vii) **Mature ego defences:** ability to respond to unpleasant information like an adult.
- (viii) **Mindfulness:** ability to be aware and experience the present.
- (ix) **Physical self-efficacy:** confidence to look after own physical health.

(x) Social self-efficacy: confidence in ability to interact with other people.

Leading with a positive challenge mindset is drawing on various aspects of these ten factors, mostly general self-efficacy, emotional self-efficacy, determination, learning self-efficacy and mindfulness. Being a staff member or contributor in times of crisis, like the COVID-19 pandemic, requires the staff member to draw on the ten factors and mostly, general self-efficacy, help-seeking self-efficacy, boundaries, physical self-efficacy, and determination.

WHAT HAPPENS WHEN YOU DON'T MITIGATE THE STRESSORS?

As we move further into Business With COVID times it will become increasingly important for businesses to attempt to use the mitigating factors to reduce stress. Below are the three types of consequences that may happen if the business does not mitigate stress during COVID-19. There may be a world of legal and regulatory ramifications for failure to mitigate the stressors. Health and safety regulators may prosecute organisations and their leaders for criminal offences under health and safety laws, there may be claims for compensation in the context of the health and safety laws' victimisation provisions, workers compensation claims for psychological injury, as well as adverse action and general protections claims under the industrial relations regime and often a mix of the above. For some industries, the failures may also trigger notifications to and investigations by relevant professional industry bodies. Some health and safety related issues may also lead to class actions and other actions in tort. In recent years we have seen a trend in Australia towards the use of multiple legal mechanisms and fora in the context of psychological injury. For example, a workers compensation claim will often be made simultaneously with an anonymous call by a claimant to a regulator to notify of a concern for psychological risk management at a particular organisation, triggering investigation and enforcement action by a health and safety regulator that is in turn used as a pressure point for leverage in negotiations by claimants.

STRESS DIATHESIS MODEL OF MENTAL HEALTH

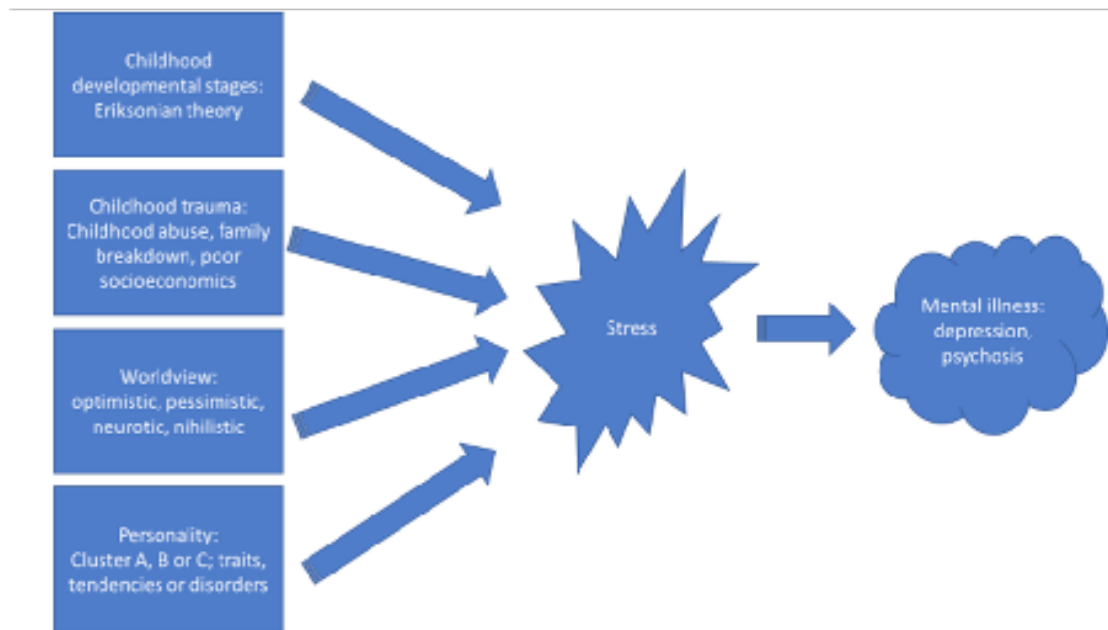
The stress diathesis model of mental illness is a biopsychosocial theory that there is a relationship between various factors that when combined with stress result in mental illness. These psychological factors include:

- Developmental stages as defined by separate theory such as Eriksonian developmental stages;
- Childhood trauma such as child abuse, neglect, family disruption;
- Attachment, whether it is avoidant, secure or anxious;
- Worldview (disposition), be it optimistic, pessimistic, nihilistic or neurotic; and
- Personality, be it influenced by cluster A, B or C personality traits, tendencies

or disorders.

The stress diathesis model postulates that a person with more factors has higher vulnerability and requires less stress to develop a mental illness, in a kind of Vulnerability times Stress type of model.

Figure 5. Representation of the stress diathesis model, showing some of the significant potential psychological diatheses (vulnerabilities)



Source: Various created to graphically illustrate points above

Under health and safety laws and the world of case law that has emerged in its interpretation, the organisation's systems and processes must be so robust as to protect the careless, inadvertent and negligent worker. There is also an expectation that risk assessments performed in effectively implementing the mandated health and safety risk management approach (and control measures identified and implemented following that risk assessment) will take into account the nature and characteristics of the individuals that make up the workforce. Indeed, there is a particular regulation that requires organisations to ensure that control measures are working effectively and maintain their effectiveness over time. From the workers compensation perspective, there is an oft-cited principle referred to as the egg-shell psyche principle (modified from the tort law eggshell skull rule). Under the principle, a worker's erroneous perception of actual events can still give rise to a compensable injury and organisations are required to take the worker as they find them. A worker may have any combination of the vulnerabilities. However, they may have been able to function relatively well as they did not have a sufficient stressor for the vulnerability to develop into a full mental illness, e.g., they may have been neurotic but not sufficiently stressed to develop Major Depressive Disorder or Somatoform Disorder.

STRESS AS AGGRAVATION TO MENTAL ILLNESS

Much like the stress diathesis model indicates that a vulnerability may become a mental illness with the addition of stress, so too may a well-controlled and managed or even recovered mental illness resurface or deteriorate. This includes mental illnesses such as mood disorders, anxious disorders and personality disorders. If a person has a diagnosable mental illness then, in most countries, they are protected under law as having a disability, e.g., Disability Discrimination Act in Australia and the Americans with Disability Act. However, such legal protection does not ameliorate the potential for stress to aggravate their diagnosis. It is not merely possible, but rather, reasonably foreseeable that in times of stress people who have a diagnosed condition are likely to be affected and it is illegal to discriminate against them for this. What is possible is to manage the stress well for the person so that the likelihood of the stress affecting them, and thereby aggravating their known condition, is minimised.

DIRECT STRESS MENTAL ILLNESSES

The third category of mental illness is a unique set of conditions. In the newest edition of the Diagnostic and Statistic Manual 5th Edition (DSM-5) (2013) they have been gathered together in their own chapter. What is unique about these conditions is that we, the mental health scientific community, actually know for certain what causes them. Sadly, something that cannot be said of many of the other mental illnesses at this time. What is also unique is they are all caused by stress or trauma. No one without an event spontaneously gets Post Traumatic Stress Disorder. Unlike say Major Depressive Disorder which people do, without any known event, get it. These disorders include Adjustment Disorder, Adjustment Disorder with anxiety, Adjustment Disorder with depressed mood also known as reactive depression, Adjustment Disorder with mixed mood, Adjustment Disorder with disturbance of conduct, Acute Stress Disorder and Post Traumatic Stress Disorder (PTSD). While most workers may be subjected to stress at this time, less will be subjected to a traumatic event sufficient to trigger PTSD. Of course, we can expect that the frontline workers in essential services (particularly in the health care and aged care industries) are likely to be more at risk in this regard in the context of COVID-19.

BUSINESS WITH COVID (BWC)

Throughout March 2020, the world of work in Australia underwent a mass upheaval of its arrangements. As daily announcements were made by the Prime Minister of Australia, the Health Minister, State Premiers and their various Chief Medical Officers, businesses, recognising their obligations to take a proactive risk management approach, began to implement their crisis management plans with the vast majority of businesses voluntarily moving to working from home arrangements wherever it was practicable to do so. Interestingly, vast numbers of organisations undertook these moves without mandatory directives from Government.

In Australia, the Government responses have been staggered and have differed

from State to State with staged restrictions being introduced firstly regarding travel (and self-isolation requirements for those who have been travelling overseas) and then across different industries (with specific guidance for healthcare, aged care, air transport, maritime industries among others), then a focus on restrictions for popular areas of public gathering (for example cinemas, restaurants and cafes), then restrictions on personal services providers (such as spas and beauty services), followed by limits on the numbers of people permitted to gather together in public (at first up to 10 and most recently a 2 person rule for gatherings either in public or in the home unless gathering with one's own household) and guidance being issued on maintaining social distancing (1.5m and 4 sqm rules being communicated as guidance).

Australia's Federal system has made communication in this time of crisis somewhat confusing for individuals and businesses to follow as the Prime Minister of Australia (following meetings of a National Cabinet made up of both Federal and State leaders) has made various pronouncements from the podium but the matters subject of those pronouncements must be enacted at the State level (usually through public health orders under public health or public emergency acts) to have any legal effect. Of course, as is the way in a Federal system, each State and Territory has its own issues and implemented various aspects of the guidance in different ways. Most recently, public orders now require individuals to remain in their place of residence unless they have a reasonable excuse. Reasonable excuses include obtaining food or other goods and services, travelling for the purposes of work or education, exercise or medical or other caring reasons. One recent difference to emerge in this respect is visiting a partner that does not live with you is considering 'caring' in New South Wales but is not permitted in Victoria. There are hefty fines for breaching the public health orders and a ramped up police presence to enforce them in the States with the most confirmed coronavirus cases.

While those public orders still enable travel for the purposes of work attendance, most organisations have transitioned to mass working from home where it is possible for them to do so, operating with skeleton staff in their offices.

While keeping up with the constantly updated and differing Government specific guidance and orders has become a full time job, the reality is that the health and safety legal obligations for businesses in Australia have not changed in their fundamentals. Organisations still owe the primary duty to ensure the health and safety of workers so far as is reasonably practicable. They must still adopt a risk management approach and that goes for dealing with and effectively managing emerging hazards and risks (including pandemics such as COVID-19) as they impact particular businesses operations and their workers.

A number of regulators have issued statements of regulatory intent at this time noting that they will take a sensible and practical approach to technical non-compliance issues (such as meeting record-keeping requirements or conducting emergency drills in now empty offices), however they have taken the opportunity of re-iterating the importance of proactively managing the risks that COVID-19 poses in discharging their health and safety obligations which includes both managing the workplace environments in terms of infection control and managing the flow on effects of the new

normal with BWC involving mass working from home arrangements.

Now working from home becomes the norm, and in the context of a pandemic and virtual shutdown (if not actually declared), all organisations must manage the risks that arise in this specific context. And this means appreciating that the home is now the workplace when the organisation's workers are at work.

For organisations participating in the mass working from home experiment, the working context has now completely changed and the basis upon which risk assessments were previously performed is now invalid. Health and safety laws require the review and revision of control measures where circumstances have changed. This would be one of those moments.

For example, the social distancing and social isolation requirements being imposed by Governments as measures to manage and prevent the spread of the coronavirus will have natural flow on effects in terms of additional or different hazards and risks for workers during the course of work. But there is not a one size fits all answer to the question as each worker will come with their own vulnerabilities and attributes as outlined above. We know there is a link between social isolation and loneliness. We know that loneliness can lead to negative mental health outcomes. This will be an area where organisations and their leaders will be required to exercise some leadership but the normal approach to the levers (training, calming, accommodation, procedures, variation and alignment) also goes out the window!

Risk assessments in the context of mass working from home (and the natural flow on effects for mental health) will require organisations to consider the nature of their business (and how it may have changed given the flow on effects of the pandemic), the consequences and flow on effects of the various Government orders but also to have a greater and more holistic understanding of their people. Understanding what someone's home life is like will be important to proactively managing mental health and wellbeing of workers through the pandemic as individuals in Australia are now effectively required to remain in their homes with limited exceptions. This will impact different cohorts within your workforce differently. For some, time at work will be blended with simultaneously performing other activities (such as supervising children at home whilst they are also transitioning to online learning arrangements) while for others, the social isolation will be extreme.

Organisations will need to take particular care with respect to workers living alone. This was already an issue lurking in the community at large. A joint study between the Australian Psychological Society and Swinburne University in 2018 identified that one in four Australians reported feeling lonely at least one day per week. It was what commentators were already calling a loneliness epidemic. Loneliness is the feeling of distress people experience when their social relations are not as they would like them to be. Our public health arrangements to combat COVID-19 will absolutely further exacerbate that situation. Australia's Commonwealth Government has recognised this is an issue with recent announcements for a further AUD 74 million for mental health programs in recognition of these issues. That includes a dedicated coronavirus wellbeing support line to be delivered by a well-recognised Australian mental health organisation, Beyond Blue, for people experiencing stress and anxiety related to the

pandemic. Given the surge on such support services, organisations will need to be supplementing such initiatives by implementing their own specific strategies to support worker mental health and welfare at this time.

Domestic violence is another issue that organisations will now need to contend with as a consequence of the blurring lines between work and non-work contexts. Only a limited number of organisations in Australia had implemented workplace policies regarding domestic violence prior to the pandemic. However, we know that this will be an increased risk faced by a portion of workers in the context of this pandemic. The Australian Human Rights Commission in 2014 estimated that domestic violence was an issue for around 800,000 women in Australia which translated to one in six female workers. This is no fringe issue.

For some, the social isolation protection measures for COVID-19 are tantamount to being locked up with perpetrators of violence. This issue has been officially recognised by Australia's Commonwealth Government with Australia's Prime Minister acknowledging a 75% increase in google searches for domestic violence services over the last couple of weeks as he announced an additional AUD 150 million for the national domestic violence initiative. In one state, Victorian Police have indicated they have seen double the number of requests for domestic violence support in the past week. Victorian Police say they are seeing an entirely new form of abuse in homes. Perpetrators are telling their partners that they have the coronavirus so that their partners cannot leave the house for any reason whatsoever (as they would be required to follow the directions to self-isolate for such cases). And as the home now becomes the place where work is performed, from the organisational perspective, it is possible that domestic violence will now actually be occupational violence. There is no longer the divide between the public sphere of work and the private sphere of the home.

You will recall from the introduction that organisations owe health and safety duties to workers when they are at work wherever it is that they are performing that work. As such, a partner perpetrating acts of domestic violence in the home while the worker is performing work has a sufficient nexus to the world of work. While many of those acts no doubt constitute various criminal offences under general criminal laws, they would also constitute offences under work health and safety laws in this context. The perpetrator would be considered an 'other person' for the purposes of the health and safety laws, being required not to adversely affect the health and safety of others (in this case, the worker) while at work. Given there is now a likely nexus with work, there would also be an expectation from health and safety regulators that organisations develop and implement a systematic way of doing what is reasonably practicable to identify and manage these risks, providing support for workers who may find themselves in these unacceptable situations. In conducting mental health impact assessments and risk assessments, organisations need to acknowledge and treat these reasonably foreseeable and known risks.

PRACTICAL RECOMMENDATIONS FOR REMOTE WORKING THROUGH BWC

All organisations need to conduct COVID-19 mental health impact assessments in

adopting the mandatory proactive risk management approach required by Australia's health and safety laws. Mental health impact assessments need to work through what are the likely impacts on an organisation's workforce in terms of the mass working from home and consider the appropriate strategies the organisation needs to implement for workers as they work through the likely impacts on different cohorts within the workforce population. This requires organisations to have a consistent and clear approach but also multiple tailored initiatives that contemplate various types of 'home life' of their workers.

In deploying strategies for managing remote working through COVID-19 organisations need to prioritise:

Establishing, maintaining and improving rapport through BWC: in particular organisations need to emphasise the importance of maintaining team rapport and cohesion with team leaders. Operational leadership at all levels becomes critical here. Organisations need to support resilience at the organisational, departmental, team and individual levels. Many of the practical suggestions below are essentially about establishing maintaining and increasing rapport.

Leadership and communications in establishing and maintaining rapport: with working from home, there is a real tendency to drift into relying on written communications backed up by phone calls. What those modes of communication miss is the world of non-verbal cues that are so critical in being able to check-in on how people are really feeling. As such, organisations need to invest in multiple mechanisms to "get eyes on their people". Video-conference facilities such as Cisco Webex, Bluejeans and Zoom have become invaluable to people at this time. Similarly, making sure that communications are not just about work. Maintaining the social aspect of work while performing remotely is also critical. A number of social media applications have been deployed by teams across Australian businesses in that regard (some have created Whatsapp groups for banter, others are using applications like Houseparty and creating Facebook groups). Recognise that you may need to 'switch it up' on occasion as the novelty wears off and use leadership at various levels to keep the use of these mechanisms alive.

Supporting and encouraging routine: Human beings crave certainty and predictability. A pandemic such as COVID-19 takes certainty away from us at a macro level. Organisations need to create conditions for some level of predictability and routine to provide some certainty. Considering how you maintain your usual rituals (such as your usual times for team meetings or your usual team social rituals (albeit as those rituals are taken into a virtual context)) may be a way of providing such comfort and a little certainty.

Managing the risk of burnout: Burnout is in fact an Adjustment Disorder. All Adjustment Disorders are a reaction to a stressor that causes clinically significant levels of distress and dysfunction. With burnout the stressor is workplace stress.

This, like any Adjustment Disorder, can be accompanied by changes to mood and anxiety responses. As the work and non-work environment are blurred, so too are working hours, compromising boundaries (which is one of the key factors in resilience discussed above). There is a tendency not to know when to start and finish when working from home and as such, a corresponding risk of burnout. Leadership communications on expectations is important here. Find a way of collectively coming together to open and close out the day – essentially setting the expectations and priorities for the day, getting people to “switch on” and then giving people permission to log off and to recognise the accomplishments of the day. That might be a quick stand up video conferencing team meeting at an appointed time at the beginning of the day – helping people to focus on their priorities and then closing the day with an end of day beverage to de-brief.

Avoid the temptation to micro-manage: Whenever there is loss of control, there is a desire to find some way of gaining it back. From a leadership perspective, we will often see people lean into micro-management during such moments of crisis. Of course it will be important for leaders to keep an eye on business objectives and achievements against those objectives at this time but look to avoid micromanaging as a result. Leaders need to lead from trust and seeing their people as the solution, not the problem. Empower and encourage people to find the new inventive ways of achieving the team goals through the challenging circumstances, as this will also increase both individual and organisational resilience.

Looking after physical health: Organisational and leadership communications should include tips for looking after physical health throughout this period. This draws on the physical self-efficacy described above. We know just how important it is to protect sleep for maintaining a positive state of psychological health. Sleep also helps the immune system with research indicating that sleep is important for helping T cells in the body to fight off infection. Getting enough rest and sleep will be particularly important during this time. Organisational communications should highlight the importance of sleep and rest to workers. We also know that a significant source of stress management for Australians is the gym workout. Our approach to physical exercise may need to change with gym closures and social distancing on gatherings but that does not mean not getting any physical exercise. Teams can support each other with innovative physical exercise challenges that can still be done in the comfort of one’s own home or whilst exercising social distancing and be another point of interaction for rapport and team cohesion. These sorts of team exercise programs can also encourage people to take breaks in the middle of the day, which can also increase productivity and cognitive functioning.

Mindfulness: There is a world of health benefits of meditation. Many organisations supported health and wellbeing promoting meditation and yoga programs (yoga includes the sensory modulation and Yerkes Dodson arousal modulation elements as well as mindfulness) in their workplaces before BWC. Less discussed

in the world of work is the importance of music for health and wellbeing. Studies have actually compared the benefits of music to meditation and found both practices were linked to significant improvements in mood and sleep quality, having powerful benefits for overall health and wellbeing. Studies have also shown that music can have positive effects on mood, have positive effects on depressive symptoms, can lower levels of stress-related hormones like cortisol and ease pain. Finding ways to encourage engagement with music can assist individuals with maintaining emotional self-efficacy, sensory modulation and arousal modulation. It also is another touch point for rapport. Sharing music videos, talking to one another about favourite music, developing a shared playlist in a music streaming service may all be simple ways of organisation's encouraging that kind of active engagement with music.

Supporting your leaders: Some leaders will have natural instincts towards these types of activities. Other leaders may not. While authenticity is key, organisations should be giving practical guidance to leaders on what to watch out for and what to think about in implementing strategies to maintain rapport. They may also need guidance on how to communicate from a place of empathy and acknowledgement of the collective experience so that they can support workers in maintaining a positive challenge mindset, how to expect and experience change and uncertainty, how to tolerate discomfort and adapt to changing circumstances and also to recognise the need for re-prioritisation of expectations (an acknowledgement of the new normal). Have your leaders acknowledge their own vulnerability in this situation and share with their people what is helping them to get through the situation. This develops the person's determination and emotional self-efficacy described above. That will, in turn, give workers a signal that sharing struggles is accepted and expected at this time, normalising the experience of the difficulty and the disclosure to others to gain support and assistance.

Accentuate the positive: There is a plethora of crisis news right now. Everywhere you turn it is a negative story. Organisations need to counter some of this with the positive stories that no doubt exist that are making it possible for the mass remote working experiment to succeed. Take moments (large and small) to acknowledge the great work people are doing and to recognise it in front of their peers. Have staff reflect on what they did to contribute to bringing about that positive event, this bolsters their general self-efficacy and decreases alienation. The positive also snowballs, achieving success and reflecting on it, and increases the chance of it happening again.

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MENTAL HEALTH IN THE PANDEMIC TIMES

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ABSTRACT: The primary aim of this paper is an attempt at the analysis of the prospective direct and indirect, short- and long-term consequences of COVID-19 pandemic for the individuals' mental health. The secondary aim is to deconstruct the binarity of categories of "mental health" and "mental disorder" in the context of the global critical situation. The pandemic and its consequences such as isolation requirements as well as uncertainty in diverse aspects of life burden the individuals with the stress that results in the increase of anxiety and depressiveness, which challenges the public mental health care systems. Since the anxiety and depressive states are the reactions to a hazardous outside situation, the categories of "mental health" and "mental disorder" needs reconsideration. The theoretical framework of present analyses is determined by the theory of social (cultural) trauma. The method used for the present study is a meta-analysis of theoretical literature, the results of empirical research on COVID-19 pandemic published so far (mostly in medical journals), studies on psychosocial aspects of the previous pandemics (SARS and Ebola), and press publications selected on the basis of their content on mental health issues in the context of the coronavirus pandemic.

KEYWORDS: pandemic, social trauma, stress, mental health, mental disorders, deconstruction

INTRODUCTION

The primary aim of this paper is an attempt at the analysis of the prospective direct and indirect, short- and long-term consequences of COVID-19 pandemic for the individuals' mental health. The secondary aim is to deconstruct the binarity of categories of 'mental health' and 'mental disorder' in the context of the global critical situation. The theoretical framework of present analyses is determined by the theory of social (cultural) trauma (Alexander, Eyerman et al. 2004). I am especially interested in the individual's biography level of social trauma. The method used for the present study is a meta-analysis of theoretical literature, the results of empirical research on COVID-19 pandemic published so far (mostly in medical journals), studies on psychosocial aspects of the previous pandemics (SARS and Ebola), and press publications selected on the basis of their content on mental health issues in the context of the coronavirus pandemic.

Mental health is one of the officially acknowledged world public health issues for at least two decades (WHO 2001). The WHO's data according to which one fourth to one-third of today's world population experiences mental states that meet formal criteria of psychiatric disorders, among who at least 264 000 000 people around the world are affected by depression (WHO 2020) and 1 in 13 globally suffers from anxiety disorders (ADDA 2020), give a picture of the world population's mental health before the COVID-19 epidemic. The state of the pandemic and its consequences (likewise any social crisis) is a source of massive stress that burdens the individuals and impact their mental condition (Dong and Bouey 2020). The awareness of danger may activate anxiety based on the primary fear in the face of direct or anticipated life hazard. Besides, the on-going regulatory changes, social isolation and the pandemic's consequence for the labor market heighten the existential fear in the face of an unknown future. In this context, we can foresee that the number of people facing stress-related mental health problems will grow. Since the states that meet the formal criteria of mental disorders are the responses to outside conditions that are interpreted as dangerous (and they are really so) we can reasonably question the binarity of the categories of 'mental health' and 'mental disease' or 'disorder'. Taking into consideration the increase in the mental health problems among representatives of today's societies along with the official social distancing requirements, the mental health care systems will have to face a growing number of challenges. The pandemic is already perceived as a game-changer for mental health care systems (Basu 2020).

COVID-19 PANDEMIC AS SOCIAL AND INDIVIDUAL TRAUMA

As Jeffrey C. Alexander writes "Cultural trauma occurs when members of a collectivity feel they have been subjected to a horrendous event that leaves indelible marks upon their group consciousness, marking their memories forever and changing their future identity in fundamental and irrevocable ways" (2004:1). Since we are not able to foresee at this moment, how long-lasting the consequences for the social identity of representatives of today's global and local communities will be, we will focus towards the relations between the collective and individual levels of social (cultural) trauma.

The COVID-19 pandemic meets the criteria of social trauma in the sense that it leads to rapid, unexpected, often radical changes in diverse areas of social life (such as economy and politics as well as individuals' everyday life). These changes manifest themselves in altering the systemic regulations as well as the rules of everyday routine and the priorities declared at the social and the personal level. Our world of habits, customs and meanings, stable so far, gets disturbed. The new forms of risk emerge, since everyday activities such as interacting with other people in regular social situations became hazardous. The economic consequences of pandemic lead to job losses, worsening the conditions of living, and feeling of uncertainty for growing number of people. In this context the problem of inequalities in the distribution of resources that enable the individuals to protect themselves occurs. Moreover, social trauma causes the new perception of pre-existing problems such as for example not enough resources in health care and other institutions that have crucial meaning in the critical situations. Finally, social trauma leads to the revision of the ways the key values, norms and notions that constitute the culture are conceptualized (Sztompka 2002: 463). In the context of life hazard the individuals change their frames of references in which they define their priorities and interpret phenomena.

A state of pandemic creates the environment conducive for conspiracy theories, moral panics and scapegoating. In this context, some secondary traumatizing events may take place. The example of them is the discriminatory commentary and harmful stereotyping aimed at people of Chinese and other Asian descent in the USA whose public image swings from 'the model minority' to "the perpetual foreigners who pose a threat to stability and order" (Lee 2020). As Mathew Lee writes "During disease outbreaks, attacks on marginalized groups are not an exception, but the norm. This racism and xenophobia are additionally stoked by discourse that casts the bodies and behaviors of Chinese Americans and other Asian Americans as suspicious and even at fault for spreading disease. While viruses and other pathogens do not discriminate between hosts based on race, ethnicity, nationality or immigration status — stigma and misinformation certainly do" (2020). Examples of this can be found throughout history. Jewish communities in Europe were targeted during the bubonic plague in the 1300s, Irish immigrants in the USA were blamed for typhoid in the 1800s, Haitian Americans were thought to be responsible for HIV in the 1980s, Mexican Americans for swine flu in 2009, and West Africans for Ebola in 2014. In 1906, a Chinatown in Orange County was torched and burned down while city officials did not prevent this act of hostility, citing disease (leprosy) and threats to public health as the justification. Chinese Americans also aroused ire for SARS in 2003, and again today, for COVID-19 (Lee 2020).

One of the emblematic mechanisms in the process of coping with social trauma is introducing the strategies that are supposed to reinstate individuals' safety on one level but deprive them of safety on the other level. The social isolation required nowadays in most countries struggling with the pandemic intends to prevent spreading the virus but it may have some side effects for people's mental condition. In this context, a problem of domestic violence and gender-based violence has to be discussed. As the WHO notes gender-based violence tends to increase during humanitarian

emergencies and conflicts (WHO 2005). Reports from China suggest the coronavirus has already caused a significant spike in domestic violence. Local police stations noted a threefold increase in cases reported in February 2020 compared with the previous year (Mahdawi 2020). Wan Fei, the founder of an anti-domestic violence not-profit in China claims that according to the organization's statistics, 90% of the causes of violence in the recent two months are related to the COVID-19 epidemic (Mahdawi 2020). Similar scenarios take place throughout the world. According to an exemplary American domestic violence hotline (in Portland, Oregon), between March 9 and March 15, the number of calls doubled comparing to the previous weeks and months (Mahdawi 2020). There has been reported that the US national domestic violence hotline is hearing from a growing number of callers whose abusers are using COVID-19 to further control and isolate them. The cases of withholding financial resources or medical assistance by the perpetrators have been reported as well as threatening to throw the victims out on the street so they get sick (Mahdawi 2020).

According to economic prognoses one of the consequences of the pandemic is global employment crisis¹, the effects of which are already being felt by individuals who have been made redundant or have had to suspend their businesses. On the bases of the data on the impact of the economic crisis on mental health, we can foresee that as the consequences of unemployment there will be an increase of mental health problems such as depression, substance abuse, addictions, and suicidal attempts. In the classic study, Marvin Harvey Brenner analyzed psychiatric hospital admission statistics and unemployment data in New York from 1841 to 1968 and noted that psychiatric hospitalization rates increase during the periods of economic recession and rising unemployment. Brenner puts forward the thesis that the inability to fulfill certain social roles (employee and breadwinner) along with the uncertainty in the period of economic depression escalates the experience of stress and intensifies the individuals' life crises. In these conditions certain mental disorders are more likely to emerge or manifest themselves. In this context, diverse dimensions of social inequalities emerge. The individuals with less material, social and cultural capital (poorly educated, without sufficient material resources, with poor social support and weaker problem-solving skills) are particularly vulnerable to the destructive consequences of stress related to socioeconomic crises. Exactly the same conclusions have been confirmed in the WHO's study on the impact of the world economic crisis in 2008 on the mental health of representatives of XXI century societies (WHO 2011). Recession and unemployment result in the increase of poverty of the households, which indirectly lead to the increase of the suicidal rates, addictions and deaths due to alcohol abuse as well as the incidence of depression (WHO 2011). The most vulnerable individuals are those of low incomes and education level, working in occupations of a particularly high risk of losing employment, monoparental families, children and adolescents, representatives of ethnic minorities, immigrants and the elders (WHO 2011, 2014). The vulnerability

¹ Within one week in March 2020 unemployment insurance claims in the US soared past three million, a record-breaking number which far surpasses previous highs. To put it in context, this figure shatters the Great Recession crest of 665,000 of March 2009 and the previous record high of 695,000 in 1982, when the US Federal Reserve tried to tame inflation through its monetary policy (Fowler 2020).

to mental health problems is related to factors such as lack of safety, feeling of hopelessness and insufficient social, cultural and material resources. Health in general and mental health, in particular, can be though interpreted as a social good and ‘capital for the hard times’, access to which is distributed unequally. The resources that help to protect mental health depend on the state’s social policy that can mitigate the effects of the crisis. The relations between mental health and social policy are illustrated by a comparative analysis of suicide rates in Sweden and Spain from 1980 to 2005. In the early 1990s, Sweden underwent a severe bank crisis, resulting in a very rapid rise in unemployment, but suicide rates were unaffected, falling steadily over this period. This contrasts with the situation in Spain, with multiple banking crises in the 1970s and 1980s. “As unemployment rates rose, suicide rates increased; when unemployment fell, suicide rates fell too. Although there are many differences between Sweden and Spain, one argument is that a major differentiating factor was the extent to which resources were budgeted for social protection, such as family support, unemployment benefits, and health care services” (WHO 2011:10). According to WHO, the average association observed in EU countries for a 1% rise in the unemployment rate is a 0.8% rise in the suicide rate. In EU countries, each additional US\$ 100 per person spent on active labor market programs per year reduced the effect of a 1% rise in the unemployment rate on the suicide rate by 0.4 percentage points. Moreover, each US\$ 100 per person spent on family support programs reduced the effect of unemployment on the suicide rate by 0.2 percentage points (WHO 2011:11). These data should be a sufficient argument in favor of investing in mental health care systems in order to prevent the destructive impact of social crises on individuals’ mental health.

THE PROCESS OF ADAPTATION TO THE CRITICAL SITUATION AND ITS CONSEQUENCES OF INDIVIDUALS’ MENTAL HEALTH

The situation of the pandemic undeniably burdens the global population with stress, the consequences of which are: heightening the anxiety to the extent that meet formal criteria of anxiety disorders, an increase of depressiveness (as the consequences of chronic anxiety and social isolation), difficulties in controlling one’s anger and other emotions (resulting from the frustration of various needs that cannot be fulfilled due to the restrictions). The critical experiences such as being hospitalized with no family present and not being able to accompany the loved ones, dying alone or the consciousness that a loved one had died alone will lead to the mass experience of grief accompanied by PTSD and depression. From a psychological perspective, this is a life-changing experience for those who survived. Some of those who witness this via media can experience indirect grief (Pinnock 2017) and develop the vicarious trauma syndrome (Jenkins and Baird 2002). Some mass behaviors and psychosocial mechanisms described from the perspective of social psychology may strengthen the anxiety. One of these mechanisms is an overabundance of (mis)information on social media and elsewhere labeled as ‘infodemic’ (WHO 2019; Dong and Bouey 2020).

The reconstruction of the process of coping with the critical situation on the social scale focuses on the collectively repeated behaviors that can be interpreted by using a

metaphor taken from the classical Selye's stress theory (Łoza 2020). According to this concept, there are three stages of the general adaptation syndrome (GAS) to the stressing, critical situation: (1) the alarm reaction, (2) the stage of resistance (adaptation) and (3) the stage of exhaustion (Selye 1976). Observing the representatives' of Polish society reactions to COVID-19 epidemic chief of the Polish Neuropsychiatry Association, Bartosz Łoza claims that the alarm reaction boiled down to rapid actions in the face of unexpected information perceived as threatening, the examples of which were making supplies compulsively, withdrawing cash, etc. The second stage boils down to the adaptation to an ongoing stressful situation. The purpose of individuals' behaviors in this stage is to normalize the emotionally aggravating situations and to reduce the tension. People become more active in social media so that they can compensate for the social isolation "offline", send funny memes, exchange ideas, how to spend time at home, recommend each other the free online events, offer altruistic help. In one of the viral movies spread in social media, there is a symbolic scene picturing the residents of Italian cities singing together on the balconies. This kind of behavior aims at abreacting and it is a part of strategies of risk and uncertainty management. The adaptation stage will last until the cause of stress disappears or as long as we have enough internal resources. The longer this phase lasts, the more weakened our resources are, until the stage of exhaustion begins. Then, as in the alarm stage, all types of reactions are possible again as well pro-social as anti-social. In this context with all types of anxiety disorders are likely to increase. This applies even to 30 percent of the population (Łoza 2020; Moskalewicz, Kiejna and Wojtyniak 2012; WHO 2020). Besides we can predict the occurrence of the other consequences of stress such as depressive states accompanied by symptoms of discouragement, resignation, lack of energy, burnout, but also rebellion, struggle, disorganization and escape behaviors. People suffering from psychotic disorders may experience the worsening of their condition and the psychotic relapses resulting from increased stress (Łoza 2020).

The difference in the pandemic threat experienced by the representatives of diverse age groups may cause tensions in intergenerational and family relations. The teenagers may feel frustration and anger because of their freedom's limitations since the perspective of hazard is not entirely realistic for them. The elderly people are in the real crisis as they are aware of deadly danger. The young people usually do not have symptoms of COVID-19 infection if they catch the virus, but as the carriers, they spread it away, whereas the elderly get ill most seriously. It can even be a *modus operandi* of this virus - the young spread it and the older get sick (Łoza 2020). The elderly people face a serious crisis and at the same time, many of them need assistance from the younger members of families. The intergenerational differences in the face of not equally distributed hazard can expose families to a crisis.

Another high-risk group is health care workers, especially those on the front line who are directly involved in the diagnosis, treatment, and care of patients with COVID-19. Due to the critical situation, they face directly on daily bases, they are at risk of developing high psychological distress and other mental health symptoms. "The ever-increasing number of confirmed and suspected cases, overwhelming workload, depletion of personal protection equipment, widespread media coverage, lack of specific

drugs, and feelings of being inadequately supported may all contribute to the mental burden of these health care workers” (Lai, Ma, Wang et al. 2020:2). According to the cross-sectional survey study on the cluster sample (N=1257) of health care workers in 34 hospitals in Wuhan, China and other regions inside and outside Hubei province, carried out between January 29 and February 3, 2020, a considerable proportion of the participants had symptoms of distress (71,5%), depression (50,4%), anxiety (44,6%), and insomnia (34%). The cited study shows that nurses, women, frontline health care workers, and those working in Wuhan, reported more severe degrees of all measurements of mental health symptoms than other health care workers (Lai, Ma, Wang, et al. 2020:1-2). Previous studies carried out after the 2002-2004 SARS outbreak have reported psychological reactions among health care workers such as fear of contagion and infection of their family, friends, and colleagues, feeling of uncertainty and stigmatization, reluctance to work or contemplating resignation, high levels of stress, anxiety, and depression symptoms, which could have long-term psychological implications (Lai, Ma, Wang et al. 2020; Maunder, Hunter, Vincent et al. 2003; Bai, Lin, Lin et al. 2004; Lee, Wong and McAlonan 2007; Chua, Cheung and Cheung 2004).

Studies on SARS 2002-2004 epidemic survivors show that the individuals who have experienced public health emergencies still have varying degrees of stress disorders, even after the event is over (Lee, Wong and McAlonan 2007; Mak, Chu, Pan et al. 2009). Therefore we can foresee the long term consequences of the COVID-19 pandemic for the populations’ mental health. In this context, the (rhetorical) question arises – is the mental health care system prepared for this?

THE SYSTEM OF MENTAL HEALTH CARE IN THE FACE OF CHALLENGE

In the context of the economic crisis, many countries are facing pressure to reduce health and welfare budgets. Despite the increased need, mental health is a vulnerable target of these cuts, as it usually lacks a strong advocacy base to oppose them, unlike physical illnesses (WHO 2011:13). On the basis of the observation of mental health problems that occurred in the populations affected by epidemics of SARS in 2002-2004 and Ebola in 2014 and the current experiences with COVID-19 we can put forward a thesis that public mental health interventions should be formally integrated into public health preparedness and emergency response plans (Person, Holton and Govert 2004; Shultz, Cooper, Baingana et al. 2016; Dong and Bouey 2020). Nonetheless, the public mental healthcare system does not have sufficient reserves to operate efficiently during a crisis.

The coronavirus pandemic is perceived as a game-changer for mental healthcare. The companies offering teletherapy platforms (Talkspace) and mental health apps (Headspace and Sanvello) have noted a tremendous increase of use within the last two months, which serves their economic interests (Basu 2020). The changes in regulations due to (February and March 2020) pandemic have contributed to the development of the teletherapeutic services market. In this case, the requirement of social distancing has a key role. Besides there are some additional changes that make it easier for people to access mental health care online. For example, the US Department of

Health and Human Services relaxed constraints that had previously made it nearly impossible to meet digitally with a doctor because of privacy concerns. Due to economic conditions that could be a permanent change, even once the current pandemic has subsided (Basu 2020). In this context, a question about the effectiveness of the teletherapy arises. Research on this issue found that patients suffering from depression who received over-the-phone cognitive behavioral therapy as well as those who met with a therapist face to face experience improvements in their mental condition but with some differences. Whereas more of those who received telephone therapy stayed with therapy, a higher proportion of them had experienced the relapse of depression after six months. Those who participated in face-to-face therapy had a slightly lower rate of staying in therapy but they were more resilient (Watzke, Haller, Steinmann et al. 2017; Basu 2020). What important is, that teletherapy might significantly increase access to mental health care and the apps may draw people's attention to other opportunities of help-seeking.

CONCLUSIONS: TOWARDS THE DECONSTRUCTIONS OF BINARY CATEGORIES OF MENTAL HEALTH AND MENTAL DISORDERS IN THE FRAMES OF CRITICAL SITUATION

In the context of the above analyses, we can ask a set of questions about the construction of the categories of mental health and mental disorder in the entirely new circumstances (comparing to the world that the contemporary individuals know). What can be the prospective consequences of the pandemic for the understanding of the categories of 'mental health' and 'mental disorder'? What kind of emotional reactions (taken into consideration when one's mental health is discussed) are adequate in the situation of pandemic and social isolation resulting from it? Is there only one scenario of adequate and adaptive reactions? How can we know which of the possible reactions are adequate and which of them are not? In such an extraordinary situation as a global pandemic wide range of human reactions are possible. Even those that indicate strong distress are understandable in their context. The individual who is rezoning with his or her environment and who is sensitive to what is going on in the outside world move toward the "health" pole on the 'health'-'disease' continuum. Moreover, in most comments on the present situation, the negative consequences of social distancing are pointed out. However, these consequences are much more painful for extraverts than for introverts. The concept of 'mental health' was mostly based on the image of an extravert, easy-going and relaxed person. The distance attitude, shyness and to some extent introversion (even though in psychological theories it is conceptualized as a dimension of personality) have been medicalized and labeled with the diagnostic category of 'social anxiety disorder' (Scott 2006; Conrad 2007). The extraverts seemed to be better adjusted to socio-cultural requirements from the pre-pandemic times, whereas the introverts, assuming that their anxiety caused by the outside conditions is not so intensive that it disorganizes their functioning, seem to be better adjusted to the circumstances that force the social isolation. The lack of the necessity of involuntary, mostly superficial social interactions and the chance to function in one's own

pace can reduce the stress and the prospective anxiety and depressive symptoms in introverts.

To sum up the whole consideration presented in this paper we can put forward a thesis that the current situation forces the global community not only to face the concrete mental health problems and design the appropriate solutions but also inspires the discussion on the assumptions underlying the concepts of mental health and mental disorders as well.

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ASSUMPTIONS OF MAXIMAL INDIVIDUALISM IN THE TIME OF THE COVID-19 PANDEMIC: ETHICAL ASPECTS

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ABSTRACT: Maximal individualism, which is currently a prevalent trend in the way many patients think, places high hopes in the achievements of biomedicine and assumes that everyone should always receive optimal medical care. Such an approach is in line with many normative and legal acts operating worldwide, including the Declaration of Human Rights. However, its feasibility and effectiveness in the time of the COVID-19 pandemic raises numerous ethical, social and economic dilemmas. The culture of prosperity and excess, characteristic of contemporary Western societies, makes it even more challenging to come to terms with this situation.

KEYWORDS: COVID-16, postmodernity, bioethics, medical ethics

INTRODUCTION

The 21st century, as it began two decades ago, has been instantly deconstructed and the concept 'fluidity of postmodernity,' a sense of uncertainty towards the adventitious nature of being has, in a matter of weeks, become more literal than at the turn of the century (Bauman 2006: 150-162). The world has become even more fluid than Zygmunt Bauman could have predicted. Not only has the myth of inner security been

overturned, which had rebuilt itself since the attacks on the World Trade Center, but also the faith in the reliability of the normative acts and ethical principles developed after World War II. The guaranty of medical care foreseen by the Universal Declaration of Human Rights strongly resonates with the assumptions of maximal individualism. These are based on the belief in the right of access to the latest achievements of medicine (Shi and Singh 2011: 113). Habits resulting from living in a culture of prosperity and excess make it difficult to come to terms with the changes we will have to face. Such changes concern access to the healthcare system, interpersonal relations and economic settings alike. Canadian researcher M. Warren notes that 'Ethicists can best help during a pandemic by working to minimize the number of difficult choices health care providers must make and ensuring that when they're made it's for the right reasons.' She also believes that 'The experience of SARS in Toronto and responses to COVID-19 in other countries suggest that ethicists should focus on early involvement to articulate relevant procedural and substantive values and embed these into response plans ... [whilst] building ethics capacity and developing tools and frameworks that will help healthcare providers live with decisions they will face' (Warren 2020).

MORAL DILEMMAS RELATED TO THE PANDEMIC COVID-19

In their daily work with other people and undertaking specific action, healthcare providers might find generally accepted ethical principles to be helpful in making professional choices. Such standards may be especially helpful in emergencies that may lead to various moral dilemmas. In such situations, ethics can be a very important tool in solving the potential problems that may arise when people are working to fulfil their medical responsibilities. Ethics is a philosophical discipline that includes a range of issues which deal with determining the essence of duty, or necessity of a moral nature. This concerns judgment that makes it possible to decide what is good or bad, what is the origin of the latter and how it can be overcome. The term ethics has several meanings. It is used to describe the theory of moral obligation (valuation of behaviour), as well as the theory of real value systems used in a specific community and the accepted ways of doing things, in other words, certain moral standards (ethos). It may also include beliefs, judgments, ways of doing things and moral practices accepted within a community (Ossowska 2000: 9-21). Despite codified standards, especially in emergencies, moral dilemmas may emerge. The term moral dilemma is understood as a situation where one needs to make difficult choices between alternatives, none of which are satisfying for the decision maker (Chyrowicz 2008: 9-15). Ewa Baum defines a moral dilemma as a situation where there is a conflict between two mutually equivalent but contradictory and exclusive forces. A moral dilemma is a situation Z (or a class of situations) requires undertaking or ceasing action X to resolve it. Certain moral reasons suggest that action X is good, whilst others, that it is morally evil. The reasons in favour of X by principle belong to a different moral orientation than those against X, albeit there are certain exceptions. The arguments for and against X are unresolvable (Baum 2010).

Codes of ethics, including the Code of Medical Ethics, which are among the oldest

codes of professional ethics in human history, were designed to help in the resolution of such a dilemma. B. Häring sees medical ethics as a systematic approach to identifying the ethos of the medical profession, and as an attempt to develop major ethical standards from the perspective of this profession (Häring 1994: 185-196). Of key significance in this respect is the Declaration of Geneva adopted in 1949 by the World Medical Association (WMA), which is to serve as a model for the Hippocratic Oath in the WMA member countries (Osińska 1992). T. Kielanowski draws attention to the variability of the ethics of the medical profession. Over the years, the relevant codes have been modified, which is an outcome of the advancement of biomedicine (Tulczyński 1975:8). An example of this are the restrictions on the modification of the human genome introduced in the late 20th century (Convention on Human Rights and Biomedicine 1997). In Poland, the first codes of professional ethics in medicine began to emerge in the 19th century. After World War II, the code of professional ethics for doctors was changed several times. Currently in force in the Code of Medical Ethics of 2 January 2004 (KEL). At present, the first articles of KEL require doctors to respect human rights and to care for the dignity of the profession, in addition to stipulating that the highest value to doctors is the patient's health. Doctors are forbidden to use their knowledge and skills in actions that are contradictory to their medical vocation. Article 3. lists in great detail the factors due to which a patient cannot be discriminated against (KEL 1994). A doctor is therefore obliged to respect a patient, regardless of age, sex, race, nationality, religion, social affiliation, material situation, political views or other conditions.

The coronavirus disease 2019 (COVID-19) is spreading around the world and governments are taking increasingly stringent measures to reduce the number of infections. China, from where the virus originates, introduced quarantines in areas with a high number of cases, whereas Italy, which now faces perhaps the most serious threat, is already fully quarantined. Some governments and medical associations recommend measures that take into account, among other things, the patient's chances of survival, life expectancy, age and 'value to society' (Spain). Thus, there are many moral dilemmas, beginning with the social obligations of national governments towards citizens, through the social obligations of individual professional groups, to the limits of the authorities' interference in and restriction of civil rights. It transpires that as a society raised in the ethos of human rights, we find it extremely difficult to give up certain habits, whether it is a morning cup of espresso in a cafeteria or Saturday shopping. Therefore, it seems that emergency situations require extraordinary ethical standards and that regular codes and moral principles are not enough. The speed at which COVID-19 is spreading makes it impossible to introduce special regulations to that would provide for planning ahead of the developments.

It is assumed, with great probability that the pandemic started in December 2019 from a single source: a 'wet market' in the Chinese city of Wuhan (Hui et al. 2020). Previous epidemics like SARS and MERS had a similar source (Hui et al. 2020). The symptoms of infection are fever, coughing and dyspnoea. Muscle pains, sputum production and sore throat are less frequent (Hui et al. 2020). While most cases cause mild symptoms, for some patients, especially the elderly and those suffering from chronic

diseases, the infection causes severe pneumonia and multi-organ failure leading to death (Hui et al. 2020a). It spreads among people extremely quickly mainly by breathing in droplets from coughing and sneezing. By 26 March, 524,013 cases were reported worldwide by 26 March 2020, with the largest outbreak in Europe being in Italy, where 80,589 people have fallen ill so far (Worldometer 2020). The situation in Italy is currently critical and requires controversial ethical standards. About a week into the epidemic's peak, it became clear that ventilating patients who were extremely unlikely to survive meant denying ventilatory support to many who could (Rosenbaum 2020). In the event of extreme resource scarcity, there are many scenarios that will continue to be unsustainable from a moral point of view, especially in view of increased forecasting uncertainty. There are questions about who to help first (Rosenbaum 2020). A similar problem will have to be faced by Spain, where especially in poorer regions, there is a shortage of medical staff and ventilators (Legido-Quigley 2020).

The pandemic we are currently dealing with puts doctors in a situation where they have to triage, which is a typical feature of medical disasters (Christ et al. 2010). However, in the current situation this does not concern patients who cannot be transported to hospitals due to the injuries they have suffered. Such decisions have to be made because there are not enough beds and ventilators in hospitals.

Despite the advancement of science, for instance the possibility of treating genetic diseases through DNA modification, the rapidly spreading virus poses a threat that is as serious as it would have been in the early 20th century. However, the moral dilemmas that arise today seem to be more difficult to solve (Žok 2019; Taubenberger and Morens 2006). The assumptions of maximal individualism we take for granted can be seen as another trait of the culture of prosperity and excess, which is characterized by the fulfilment of supra-basic needs and access to commodities that were once considered a luxury (Dziamski 2016). In the current situation, Western societies are not only afraid for their lives, wanting to keep themselves safe, for example, by excessive accumulation of goods,¹ but they also fear being deprived of the right to basic medical care. Hospitals and clinics are limiting the number of patients, therapies and treatments for fear of the virus (Salwacka 2020). In the case of sudden health threats, when a pandemic takes on unpredictable proportions, the rationing of scarce medical resources is inextricably connected with numerous ethical dilemmas resulting from the conflict between the laws of economy and purely moral imperatives. The literature on healthcare rationing most often cites trifurcation, namely the so-called 'macro,' 'mezzo' and 'micro' (micro-rationing) level (Putato 2007). The macro level concerns the allocation of resources at national level (by governments and individual ministries), which may involve politicisation and purely theoretical disputes. The mezzo level refers to the distribution of resources within administrative districts and larger hospitals; hence the allocation of such resources is usually decided by local authorities. The last level of rationing medical measures and procedures, or micro-rationing, comprises all actions taken directly by medical personnel at institutional level (hospitals or other healthcare institutions). Thus, medical personnel have to face many decisions, some

¹ <https://gospodarka.dziennik.pl/news/artykuly/6465737,koronawirus-covid-19-sklepy-limity.html>

of which are made intuitively, not entirely consciously.

Rudolf Klein lists a number of strategies that healthcare professionals use when they are forced to categorise patients. These include i) deterrence: a large number of administrative requirements that effectively discourage efforts to obtain treatment; ii) delay: extending the whole process of obtaining treatment; iii) dilution: interruption or termination of treatment; iv) denial: exclusion/selection of certain groups of patients from/for treatment; and v) deflection: referral to other medical services (Klein 1993). Other criteria of resource allocation and access to medical services are of a technical nature. These include performance, efficacy, outcome and classification of patients based on needs, merit, risk (risk of undertaking treatment), benefit (outcome of undertaking treatment), and the principle of saving a patient whose life is at stake (Putato 2007: 42-47).

The drastic increase in the number of patients in Italy and Spain results in a shortage of beds and ventilators in hospitals: the demand exceeds the capacity of medical institutions. As pointed out in *Politico*, the shortage of hospital resources faces medical staff with increasingly difficult choices. Anaesthesiologists and doctors have to decide which patients will have access to beds and ventilators, of which there is certainly not enough for all those who need them. In Italy, the decisive criterion is the chance of survival. In Spain, an additional criterion is the patient's 'value to society.' This is apparently related to the criterion of 'maximising the common good.' According to the document developed by the Bioethics Working Group of the Spanish Society of Internal Medicine (SEMI 2020) together with the Spanish Society of Internal Medicine (SEMI 2020), priority should be given to the most promising patients in terms of the QALY index which expresses life expectancy adjusted for quality. 'This is not only about survival, but also about the conditions in which the patient will live.' The document stresses, however, that the patient's age cannot be the only factor of health assessment and patients should be diagnosed 'globally.' This means that people who are dependent on the patient should be taken into account to maximise the benefits for as many people as possible. In the document, doctors refer to the 'emergency situation that justifies the proposals.' Whilst this is an example classic utilitarianism, it is in all cases associated with the fact that we are facing dramatic choices.

Aware of the poor condition of the health care system in Poland, we should wish for all healthcare professionals to be protected from such a situation. Unfortunately, the negligence of the last three months cannot be repaired. The observance of Human Rights, even during the epidemic, is the duty of the state. Obviously, the COVID-19 pandemic requires special measures and restrictions to prevent, or rather slow down the spread of the virus. State borders have been closed, public gatherings have been banned, freedom of trade and business has been restricted. Doctors and other healthcare professionals may be called upon to work to contain the epidemic. But despite the fact that the right to life and respect of human dignity cannot be suspended, under the provisions of the Act on Preventing and Combating Infectious Diseases and Infectious Diseases in People (*Journal of Laws* 2008, no. 234), the Polish authorities may grant themselves special rights, such as to refer individuals to compulsory work. This is mainly the case of doctors, diagnosticians, radiologists (the disease can be di-

agnosed by x-ray and CT imaging of lesions in the lungs [Li and Xia 2020]) and nurses. They may be appointed by the Minister of Health and be required to work for up to three months at a specific healthcare institution (*Journal of Laws* 2019, 152). The only individuals excluded from work in conditions that carry the risk of infection during an epidemic are persons under 18 or over 60 years of age; pregnant women; parents/carers of children under 18 years of age, including single parents/carers; persons who have been declared partially or completely unfit for work; disabled and chronically sick persons, or any other persons specified in Art. 2 of the Act of 31 July 1981 on the Remuneration of Persons holding State Functions (*Journal of Laws* 2019, 152). Excluded are also members of parliament and senators of the Republic of Poland.

Despite the restrictions imposed by the Minister of Health, certain human rights must not be violated, namely the right to freedom and the rights specified in the (*Polish Constitution* 1997) in: Art. 30 (human dignity); Art. 34 and 36 (citizenship); Art. 38 (protection of life); Art. 39-41.4 (humanitarian treatment); Art. 42 (legal liability); Art. 45 (access to courts); Art. 47 (personal assets); Art. 53 (conscience and religion); Art. 63 (petitions); Art. 48 and Art. 72 (family and children). These rights must not be violated under any circumstances.

It is difficult to reconcile compulsory work with concern for the safety for one's family and relatives. An analysis of healthcare professionals' statements in social media and on information portals shows that they are afraid of being referred to work in isolation wards due to the abovementioned concerns.² Doctors of specialisations other than infectious diseases who have remained at work (many others are on sick or parental leave) are overworked and stressed, because they have no protection against infection, for example masks, which are given only to those who have direct contact infected patients. These concerns are emphasised by the District Medical Chamber in Warsaw (OIL), which officially opposes the changes made to the Polish law in connection with the pandemic. They believe that the regulations are being created too hastily, that they focus on absolute and ill-considered exploitation of doctors (of who there are not enough even in normal conditions) and that they do not amend the faults in the system. They complain about the chaos, problems with personal protective equipment and shortage of tests. Furthermore, it should be noted that they strongly oppose the provisions of the government's draft of the law amending certain laws on the healthcare system related to the prevention and combating of COVID-19, which boil down to the fact that even doctors who are nursing mothers, doctors who are mothers of toddlers, doctors who are parents can be forced, at any time, to work in order to contain the epidemic (OIL 2020). The media coverage of the doctors' and nurses' work conditions shows that they do not have any basic antiviral protection in the form of masks, goggles or visors or gowns (Głowacki 2020). Masks are sewed by volunteers, but although this help is extremely valuable, a dilemma arises concerning the citizens' constitutional right to healthcare, which has been shifted to members of the public and non-governmental organizations (NGOs).

² The analysis was conducted between 20 and 26 March on Facebook and Twitter, and the portals TVN, WP, Onet and Gazeta.pl.

Such a dilemma, in the context of anti-violence organisations, was raised by Nancy Fraser, who criticized successive US governments for their nonresponse to current problems and passing on their responsibilities to non-governmental organizations (NGOs) (Fraser 2014). In Poland, this is exemplified by Great Orchestra of Christmas Charity (WOSP), which for over two decades has been supplying neonatal wards with lifesaving equipment (WOSP 2020).

This brings us back to the moral dilemma of a doctor appointed to work in an infectious ward. The conflict is multifaceted, and contradictions appear both on legal and ethical grounds. The duty to work in an epidemiologically dangerous place seems to contradict to the right to protect life.

Undoubtedly, a pandemic situation requires special measures to ensure a minimum of security for citizens. However, these solutions should be implemented rationally, after an interdisciplinary consultation. Our collective duty is to minimise the number of the difficult choices that healthcare providers must make in a time of a pandemic. Evidence from the COVID-19 pandemic and past outbreaks indicate that planning forward and preparation are key to fulfilling this duty. When avoiding difficult choices is not possible, the ethicists' duty is to ensure that healthcare providers and other decision makers are equipped with what they need to make decisions and to act (Warren 2020).

CONCLUSION

In the extreme conditions of a pandemic, maximalist individualism seems to be a utopian fantasy and social factors, including economic ones, often contradict moral precepts. In such cases, the law sanctified by tradition, *salus aegroti suprema lex esto*, where the patient's health is considered a doctor's highest priority, the good of the doctor is sometimes difficult neglected. This is a real challenge for health policies in all countries, where, on the one hand, the capacity of the medical vocation is understood as the priority of protecting human life and health, preventing diseases, treating the sick and providing relief from suffering, and, on the other hand, large-scale and effective implementation of these tents is a serious problem and in practice, turns out to be extremely difficult. To paraphrase the Latin motto: *Si vis salutem, para contra morbum*,³ or 'If you want to be well, be prepare to be sick. Despite sounding ominous, it is rather a warning and a bit for yourself for your illness, does not sound ominous to us, but rather a warning and at the same time a guideline for the future.

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³ A direct reference to Vegetius, military historian and theoretician: *Si vis pacem, para bellum*, (If you want peace, be prepared for war).

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BIOGRAPHICAL NOTE

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FAMILY WITH CHILDREN IN TIMES OF PANDEMIC – WHAT, WHERE, HOW? DILEMMAS OF ADULT-IMPOSED PROHIBITIONS AND ORDERS

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ABSTRACT: The coronavirus has closed adults and children at home. We communicate by phone or the Internet. Life has moved online, it has lost its rhythm within traditional systems of school and work. As a result of the COVID-19 pandemic spreading around the globe, many states have introduced numerous limitations in adults' and children's social functioning. The majority of education and care institutions have been closed, while companies and institutions whose type of activity allows to do so have decided to transform their work patterns into remote work. This new situation has particularly affected children, who, for their own and their families' safety, have been cut off from the possibility to participate in activities and events that used to be part of their daily lives. In order to look at this situation and analyse the situation of families with children, an online survey questionnaire was conducted among 158 adults that aimed to collect data from below (from the perspective of reflexive adults looking after children in the situation of spatial-mobile limitations). In the article, we discuss changes in parents' and children's lives and analyse the social background of the areas discussed.

KEYWORDS: children, right to nondiscrimination, epidemic, online activities and spatial-mobile limitations, prohibitions and orders

INTRODUCTION

We cannot solve our problems with the same thinking we used when we created them.

Albert Einstein

The coronavirus has been spreading since December 2019. An epidemic unseen since over a hundred years ago (in 1918-1919, the Spanish flu killed at least 50 million people around the world) lulled the vigilance of authorities and surprised populations on all continents. Panic among the authorities and societies – in the wake of regulations and decisions holding the view that isolation is the best policy to control the virus – has locked adults and children in their homes. Particular states introduce new restrictions in order to reduce the spread of the coronavirus. With regard to the growing number of infections in Poland, on March 24th 2020 the government introduced travel restrictions: banning people from leaving their homes without vital need (such as going to work, buying essential food and hygiene products or a visit at the chemist's). Parks, forests, playgrounds and riverside boulevards have been closed. As the minister of health informed, regulations concerning church services, funerals and public transport would also be tightened. It is only the top of the iceberg as a tendency to extreme behaviours is revealed in crisis situations.

In Poland, we are currently moving from the so-called alarm stage of stress to adaptation stage of stress connected with the coronavirus (Łoza 2020). The first stage happened spontaneously. It was surprising, and for the majority of people - frightening news they reacted to instinctively for instance by purchasing many vital products such as toilet paper, oil or pasta. In the adaptation stage, we adjust to the new, uncertain reality. It is a stage of responding to and managing the threat through various behaviour strategies and expression tools. It involves being hyperactive on social network sites, posting memes about the epidemic, playing instruments or singing on balconies, but also resistance and rebellion against the new reality that shattered our safe daily lives. Adaptation stage is simultaneously a period of waiting for the next stage in which we anticipate the eradication of the causes of stress, development of constructive strategies of coping with the present situation, or one in which we lose internal resources leading to exhaustion stage.

Suspended in the new reality while being closed at home, we communicate by phone or the Internet. We try to adapt to the new challenges and tasks. Adults' and children's lives have moved online to an even greater degree, lost their rhythm of traditional preschool, school and professional functioning. Suddenly, we have been pulled out of our daily rituals and responsibilities and held back in place, in the 'comfort' of our homes. Rush, mobility, a chase after what seemed the most important halted. Due to the COVID-19 pandemic spreading worldwide, many EU countries have closed their borders. Numerous restrictions in adults' and children's social functioning have been imposed. The majority of education and care institutions have been closed, while companies and institutions whose work forms allowed to do so have introduced remote work patterns. This new situation has particularly affected children, who – for

their own and their families' safety – have had their freedom to play with their peers, participate in regular activities and events taken away. Additionally, we have found ourselves in a narrative construction of this crisis escalated by the media highlighting the words 'virus', 'plague', 'quarantine', 'social distancing', 'sanitary crisis', 'death', 'war', 'epidemic' or 'invisible enemy'.

WHAT? WHERE? HOW?

Ensuring equality *de jure* does not necessarily lead to *de facto* equality.
(see Liebel et al. 2014: 16)

In the situation of a sudden crisis, problems, inequality and discrimination do not vanish – they are exacerbated. Those weakest and youngest, frequently overlooked or ignored by adults in their adultist approach: children, are the most exposed to the negative effects of chaos and disorganisation. It is particularly visible in times of crisis both in the dimension of media discourse and top-down activities oriented towards adults. Additionally, the majority of adults find it difficult to navigate the radically new context of functioning. Trying to cope with their new reality, they are partly unaware of how and what challenges young people (their children) face every day. They are frequently unaware of their own approach towards children – their own reactions or lack thereof in crisis situations such as an epidemic. Among those in particularly dramatic situations are families and children who, with regard to their origin, difficulties connected with material situation or living in dysfunctional, educationally deficient backgrounds, could not in the past and today still cannot count on the support of their close ones or whose close ones are an actual threat.

The traditional approach (prefigurative and cofigurative culture), in which knowledge is transferred from adults to children, is proving ill-suited in the increasingly more digitalised society in which young people usually have better digital competences than their parents (prefigurative culture). However, stress and a sense of responsibility for those under adults' care generated by the crisis situation inhibit the implementation of participatory approach and attempts to creatively solve the emerging challenges for instance in the system of remote education. Even if such an approach were undertaken, implementing might not be successful in the situation when digital exclusion, understood as lack or limited access to modern forms of communication and information technologies (Motylińska 2019), is largely correlated in Poland to age, and mean age of teachers in Polish society is increasing. In the school year 2018/2019, mean age of teachers in Poland was 44,1 (*Głos Nauczycielski* 2019), reaching approximately the age of the generation of present parents of primary and secondary school students. Digital exclusion can result from lack of competences, reluctance to embrace new technologies or financial limitations. In the context of school environment, lack of or low digital competences among teachers, in addition to limiting the possibilities of enriching the learning process, are also frequently the reason for a lack of understanding between the teacher and students. They also make it difficult for teachers to comprehend the nuances in the functioning of student groups connected with virtual

reality (e.g. aspects related to cyber violence which, in this age group, often takes place on social media websites where teachers are not, do not want to be or do not know how they could be present).

Observation of Polish educational reality allowed scholars to conclude that "teachers and academic lecturers are still reluctant to use or are ineffective at using digital education tools that support the teaching process" (Głomb and Kniaź 2019), while two thirds of classes in Polish schools have a form of lectures that facilitate neither students' activity nor taking full advantage of the potential of digital tools and applications. In a 2014 study on the use of information and communication technology in didactic work, despite the fact that the majority of respondents expressed positive opinions about the potential of new technologies and declared that they frequently used the Internet to search for teaching resources, multimedia resources and to expand their knowledge, only 26,3 % of them used information and communication technologies to prepare online lessons. This, along with the fact that many teachers do not have their own e-mail account, can be an indication of digital exclusion (Kochan 2016). Unfortunately, reports from recent months confirm that since the study cited above, there has been no considerable change in this aspect (Sewastianowicz 2019).

In this context, overnight, we found ourselves in a situation where due to the epidemic, the majority of social and professional life has been moved to the Internet. Almost immediately, the Ministry of Education obliged teachers to conduct remote teaching. In the crisis situation which is in itself a source of considerable fear and uncertainty, teachers were additionally challenged with the necessity to move far beyond their comfort zones and rapidly adapt to remote teaching, while having to simultaneously look after their own children. As a result, the parents were initially flooded with assignments sent by teachers, which brought on a sense of frustration, particularly when they were unable to take time off work to look after their children.

Only some children and adolescents can complete the tasks offered by the school (in various forms) in a fully independent manner. Only some parents have the possibility to accompany their children in their education at home. Other parents have their own professional responsibilities, still others are unable to cope with the challenges (being overloaded with physical work, lacking skills to do remote work). There are also those who cannot sufficiently support their children in remote education due to various other factors (small flats, difficult living conditions, lack of access to computers, illness, lack of knowledge of Polish among foreign families).

Access to the Internet and devices enabling the use of the Internet is the basic condition to work and learn online. In this regard, the situation in Poland seems to be very good. According to a GUS (Central Statistics Office) survey "Information society in Poland in 2019", 86,7 % of households had Internet access, while 83,1 % of households had at least one computer. The factor that played the greatest role in the availability of the Internet and computer equipment was the presence of children in a particular household (99,3%), which supports the thesis put forward earlier in the text that young householders inspired the development of their families' digital competences. It is also worth pointing out that members of roughly 50% of the households without access to the Internet indicated lack of digital competences as the reason for

the lack of network connection. In recent years, the program of the Ministry of Education “Digital School” resulted in a series of activities being implemented to enable the school environment to take advantage of amenities offered by new technologies (the program involved e.g. trainings for teachers and students, equipping schools with electronic equipment and installing Internet connections at schools). The ministerial website even offers e-textbooks and online lessons enabling students to become familiar with learning material on particular stages of education.

However, as researchers from the Telecommunication Development Bureau argue, access to the Internet and Internet devices alone is not enough to effectively use its resources and simultaneously protect ourselves against its potential threats. Lack of ICT skills is the key barrier in this regard. As results from Measuring the Information Society Report. Facts and figures 2019 conducted between 2014 and 2018, in 40 out of 84 countries around the world included in the study less than half of the population had basic computer skills (e.g. copying a file or sending an e-mail with an attachment). Unlike the level of access to the Internet, which, despite being lower than European average can still be perceived as relatively high, when it comes to digital competences of the society, Poland ranks much lower than the majority of European countries. Only 25-50% of Polish citizens have basic and standard computer skills and 0-5% advanced computer skills, and the level of digital competences is correlated with age.

The crisis we face within our families plays out on various dimensions: social, cultural, political, educational, psychological and interpersonal. It involves, *inter alia*, the fact that the traditional daily routines, habits and patterns and the old tools that worked up to this moment, are failing to function in the new situation. This crisis has its own dynamics. The present phase of confronting a phenomenon previously unknown to us reflects a whole spectrum of inefficiencies of the strategies we use to cope with the new reality and take responsibility for the newly emerging challenges. This chaos, uncertainty and fear of the unknown much as the absence of familiar order leads to growing tensions, anxiety, irritation, helplessness and frustration. Some families assume that they are unable to cope with the multiple new challenges. They experience a sense of chaos, inability to take decisions while focusing on negative information that aggravates panic. Other families look for strategies to handle the difficulties. They move on to mobilisation stage and initiate all available coping resources.

And yet, we have to bear in mind that preschool and school children make up a large part of family members in Poland. Through the so-called “protective” measures, they have been closed in their homes. Children, their parents and guardians react to the crisis in various ways. They share the common (government-imposed) order to stay in and prohibition to leave their homes without a vital reason. They differ in how they comply with orders and prohibitions in daily functioning, both on national and family level, as in many families the decisions about daily life have been made by adults without inviting their children to join the dialogue.

PROCEDURE, METHODS AND RESEARCH SAMPLE

In the second half of March 2020, we conducted research in quantitative-qualitative

paradigm. It was preceded by thematic desk research involving a review of vital literature, publicly available scientific, official and third sector data generated by various entities about the situation of children in families in times of an epidemic as well as media and political information connected with the epidemic.

The quantitative-qualitative study was conducted through an online tool. It was a survey questionnaire with open- and closed-ended questions (12 questions: 6 in the child's section and 6 in the parent's section). The tool consisted of an instruction, background data questions, a section describing the situation of parents, a section describing the situation of children from the parents' perspective, and a section with additional parents' reflections and acknowledgments for completing the survey.

In order to select the sample for the survey questionnaire available online, we applied the snowball method ensuring maximum variability within the sample, i.e. inviting parents who speak Polish and live in various parts of the country to participate in the study. The total research sample was 158.

ETHICS

All research participants were informed about research aims and ensured that the data collected would be used only for academic purposes and to prepare a research report.

The study carried out through a survey questionnaire provided information that the participation was fully voluntary. The respondents were able to refuse participation both before the study and while answering the survey questions. The questions did not address controversial issues, nor did they have a negative influence on the participants. The invitation (to adults) to answer the survey questions did not burden our respondents. On the contrary, many of them included comments that the questions prompted them to reflect on their reactions towards children in the situation of the epidemiological crisis.

The respondents' personal data were not used in any report. Following research ethics and the participants' wellbeing on every stage of the study, we were available for the respondents answering the survey questions.

LIMITATIONS

Problematic aspects of conducting the study included Internet access and digital competences, which limited our research sample. Some of the respondents perceived filling in the survey during the day as a problematic waste of time and energy and decided to answer the questions in the evening/at night (when the children were asleep). The survey was distributed mainly through social media and e-mail addresses among Polish people. Those who do not use these forms of communication were unable to learn about the study or participate in it. We realise that we did not reach parents who do not use these communication methods but who would want to share their experiences based on which projects supporting families could be designed.

Another issue concerns individuals who, for various reasons, are not interested in their children. These parents are unlikely to participate in this type of study. This

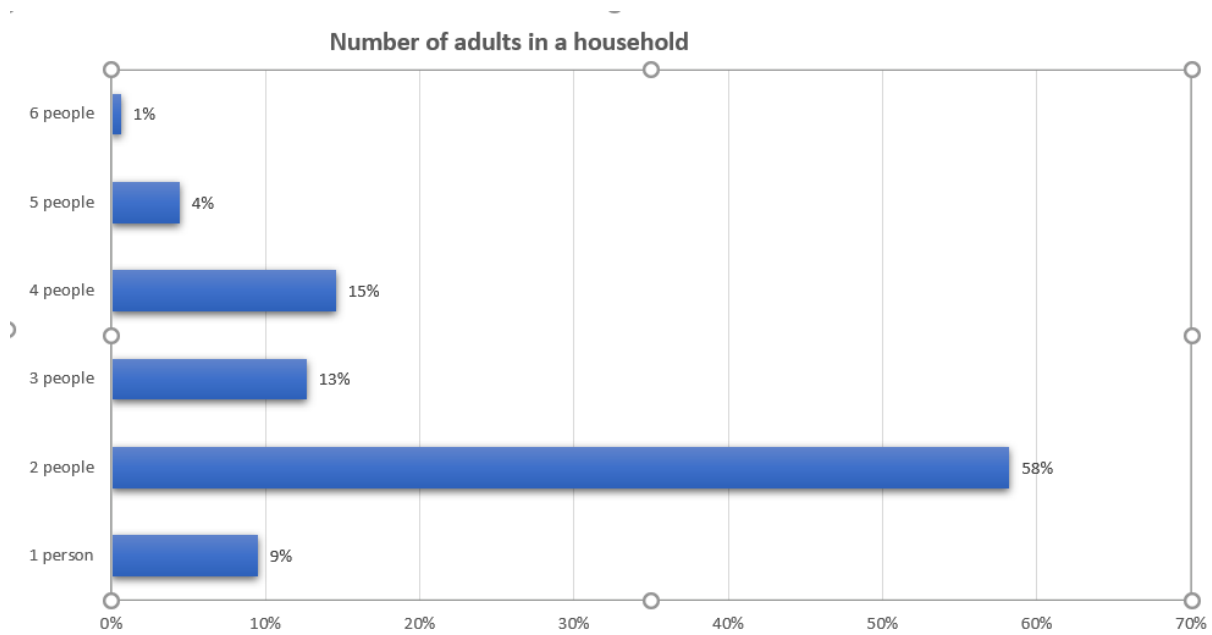
is also true about parents who are too burdened with responsibilities (remote work, additional duties) or those whose digital competences are insufficient to learn about this type of survey and to fill it in on the Internet. Also, in the situation when a close emotional bond between parents and children is missing or when mutual understanding and trust are absent from the relations between parents and children, the parents' assessment of emotions that the present situation evokes in children may not fully reflect what the children actually experience. It was our intention to conduct the study from the perspective of adults. We took a position that research done in the sensitive context of an epidemic should not burden children. Despite the child's right to reliable information enshrined in the Convention on the Rights of the Child (1989), this group of citizens did not receive this type of information from the authorities (Ombudsman for children, the minister of education). We realise that conducting the study among children might have revealed other problem areas than those indicated by the parents, yet we were motivated by the children's wellbeing (in terms of not interfering in sensitive subjects that might additionally influence or disturb their sense of security), which, particularly in the first stage of adapting to a life in the conditions of an epidemic and lack of possible psychological support, should protect children against additional negative consequences and impact of activities initiated by adults (more: Liebel and Markowska-Manista 2017).

FINDINGS

RESEARCH SAMPLE STRUCTURE

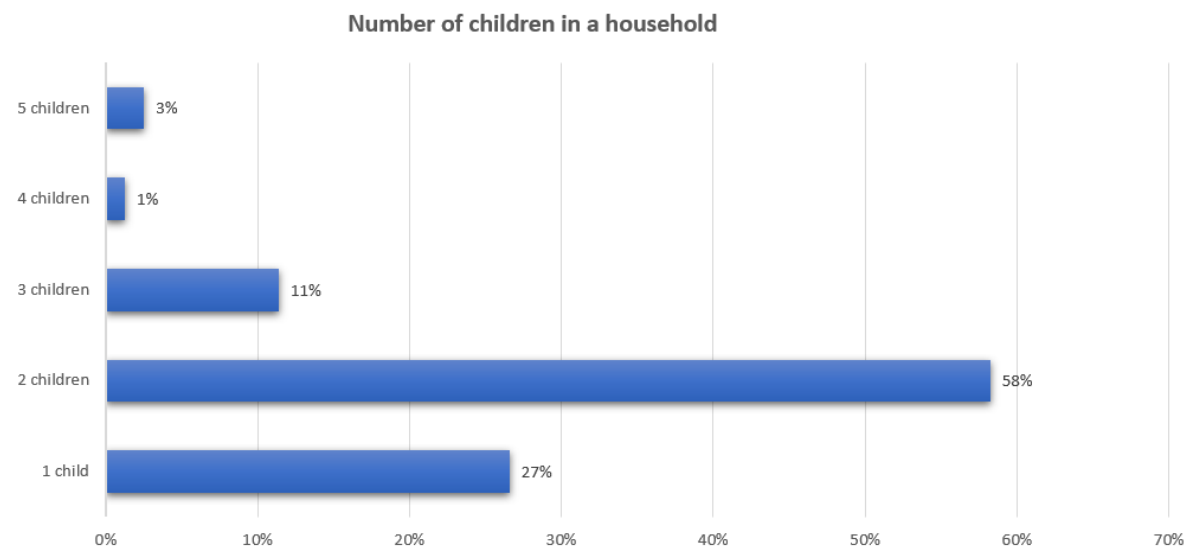
The analysis considered the situation of parents through their subjective evaluation and the situation of children from the perspective of their parents. Women constituted the vast majority of the respondents (85,7% vs men 13,3%). The age of a significant number of the participants ranged from 30 to 39 (46,2%) and 40 to 49 (46,8%). The remaining age groups were represented by a much smaller number of respondents, respectively 20-29 years old (4,4%), 50-59 years old (2,5%), 60-69 years old (0,6%). The answers were provided primarily by individuals with university education (87%), which can be seen as one of the limitations of this study. Persons with secondary education constituted only 12% of the respondents and adults with vocational education 1%. The respondents represented various professions (e.g. businesses employees, managers, teachers, NGO staff, postmen, accountants, academic teachers). The majority of the participants are residents of urban (38%) and rural (31,5%) areas. The remaining respondents live in small (7,6%), medium-sized (12%) and large cities (10,8%). 92% of the respondents are married or in partnerships, while 8% are single parents. The majority of households consisted of 2 adults (58%) [Fig. 1] and 2 (58%) or 1 (27%) children [Fig. 2], while the children's age oscillated between several months to 22 years old (studying children were also included in the study). 52% of the participants live in blocks of flats, while 48% in detached houses. As far as children's own space in the house is concerned, the majority of the children (93%) have their own rooms.

Figure 1. Number of adults in a household



Source: own elaboration.

Figure 2. Number of children in a household



Source: own elaboration.

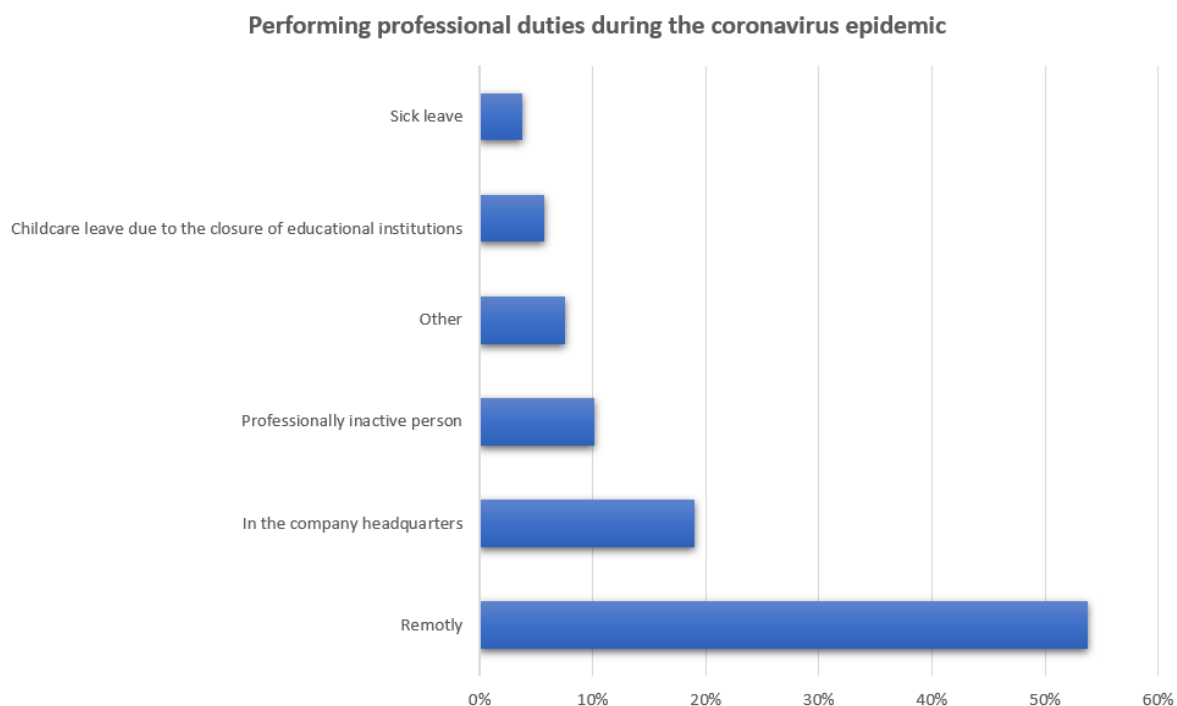
THE SITUATION OF PARENTS

FULFILLING PROFESSIONAL DUTIES DURING THE CORONAVIRUS EPIDEMIC

The majority of parents who participated in the study are professionally active (73%). Over a half of them (54%) work online [Fig. 3]. This means that they have to combine childcare, assisting the children in learning and completing the assignments sent by teachers with full-time remote work that requires access to adequate technology (In-

ternet connection, computer equipment). Approximately one fifth (19%) of the parents still fulfil professional duties at business premises. In the case of this group of parents, childcare seems particularly demanding in terms of logistics since according to existing regulations introduced with regard to the coronavirus epidemic, only parents of children below the age of 8 are entitled to childcare leave. In the case of older children, despite the fact that parents are responsible for this age group as well, they are unable to take advantage of paid childcare leave. In the situation where many companies suspend or limit their activities in the face of the commencing crisis, very few parents are willing to take the risk of losing a steady income having a family to support, while often being also financially burdened with mortgage.

Figure 3. Performing professional duties during the coronavirus epidemic



Source: own elaboration.

WHAT IS THE MOST PROBLEMATIC FOR THE RESPONDENTS 'AT PRESENT MOMENT'?

Among the most challenging problems in the present situation indicated by the parents (the study was conducted between 24-28 March 2020) is the necessity to combine online work with childcare. They point to the lack of possibility of focusing on professional duties while having to provide care to their children, organising their time in an interesting and creative way and helping them with learning and completing the assignments sent by teachers. Many parents also indicated that while they had more time to spend with their children, the child's natural need to be constantly close to the parents through conversation or cuddling did not allow them to concentrate ad-

equately on professional duties, which reduced their work efficiency. It is also visible in other aspects listed as challenging such as time management and childcare (12%), or helping children with completing school tasks and motivating them to learn, and poor organisation of online teaching (13%). The parents also commented that if the lessons online were conducted in real time, focusing the child's attention on classes conducted by teachers in an active and engaging way would significantly relieve their responsibilities. If young children receive a task to become familiar with new subjects based on their individual work with textbooks or exercise books, it naturally requires significant contribution from the parents or other caregivers. Lack of possibility to maintain social contact both by adults and children is an additional difficulty reported by the parents (20%). The respondents drew particular attention to children's sadness caused by the fact that they are not allowed to play with their peers from preschools or with their classmates (to some degree, "live" lessons using online teaching platforms might substitute personal contact), while lack of contact with the children's grandparents was reported as particularly painful.

Table 1. Most problematic issues for parents in the present situation

Most problematic issues for parents in the present situation:	
Combining online work with childcare and household duties, lack of adequate conditions to do remote work	23%
Lack of possibility to move freely and maintain social contact	20%
Helping children with completing their school tasks and motivating them to learn, poor organisation of online teaching	13%
Time management, childcare and organisation of children's time	12%
Fear for one's own and family's health due to the risk of being infected with the coronavirus	8%
Anxiety connected with family financial situation and the anticipated economic crisis	7%
Doing shopping	5%
Lack of access to basic medical care and rehabilitation	4%
Lack of mobility	4%
Lack of digital competences	3%
Psychological problems	3%
Work	3%
Nothing	2%
Lack of clear information	2%

Source: own elaboration.

HOW DID YOU EXPLAIN THE PRESENT SITUATION TO YOUR CHILDREN?

The majority of parents declare that they discuss the situation with their children with openness and honesty. They try to use simple language, explain that a new virus appeared that is still unknown to doctors, how we can become infected, that it produces symptoms similar to flu (cough, fever); some parents also tell their children that the virus can lead to death. For this reason, in order to ensure their own safety and the

safety of others (older people in particular), they have to restrict leaving their homes and meeting their grandparents as well as friends from school or preschool. They also draw attention to the necessity to maintain hygiene and wash one's hands. Some parents also declare that the children had received basic information about the situation from their school teachers before education at school was suspended. In the case of the youngest children, the parents either do not address this situation at all (if they believe that the child is too young to understand it), or they try to use fairy tales, metaphors or rhymes to explain the seriousness of the situation to their children. Many of them stress that they try to inform, but in a way that would not arouse fear or aggravate a sense of insecurity. There were several cases in which the respondents applied the strategy of imposing restrictions without explanation ("this is how it's supposed to be", "it's not allowed and that's it") or scaring the children, e.g. "If you leave the house you can bring the virus and it can kill me".

HAVE NEW RULES OF FAMILY FUNCTIONING BEEN INTRODUCED AT HOME?

Only 16% of the respondents declared that with regard to the epidemic no new rules of family functioning had been introduced at home, and approximately only 10% of the families in which new rules have been implemented confirmed that they had been consulted with the children. Among the most commonly mentioned new rules were frequent washing of hands and drawing particular attention to hygiene (29%), limitations in external contacts and leaving the house (27%), learning online at home due to the closure of schools and preschools (15%) and organisation of daily routine (12%).

Table 2. New rules for the functioning of the family

New rules for the functioning of the family:	
Hygiene (frequent hand washing)	29%
Limiting external contacts and leaving home	27%
No school, learning online	15%
Organisation of daily routine	12%
Disinfection of objects brought from outside	6%
Additional household duties, more work	4%
Respecting the need for parents' work, not disturbing	4%
More time to watch cartoons, tv, use the computer	2%
Covering your mouth when you sneeze and cough	1%
Stocking up on food and medicines	1%
Additional precautions	1%
Use of contraceptions	1%
Daily walks with the family	1%
Rational use of food stocks	1%

Source: own elaboration.

HOW HAS THE PRESENT SITUATION CHANGED TIME SPENT WITH THE CHILDREN?

Half of the parents (51%) declared that the present imposed social isolation caused by the COVID-19 virus pandemic resulted in the fact that the family spend more time together and have the opportunity to participate in many joint activities such as reading books, playing board games, doing arts, talking, cooking or watching films together, which evokes positive feelings. However, some of the working parents declared that due to the necessity to combine work with childcare, the contact was becoming more tense, while time after work that the parents would normally devote to entertainment and conversation with the children, was now spent explaining school subjects and doing homework. Only 10% of the parents commented that not much had changed in the time they spend with their children in the new situation as compared to the situation from before the epidemic.

Table 3. How the current situation changed the way in which parents spend time with children

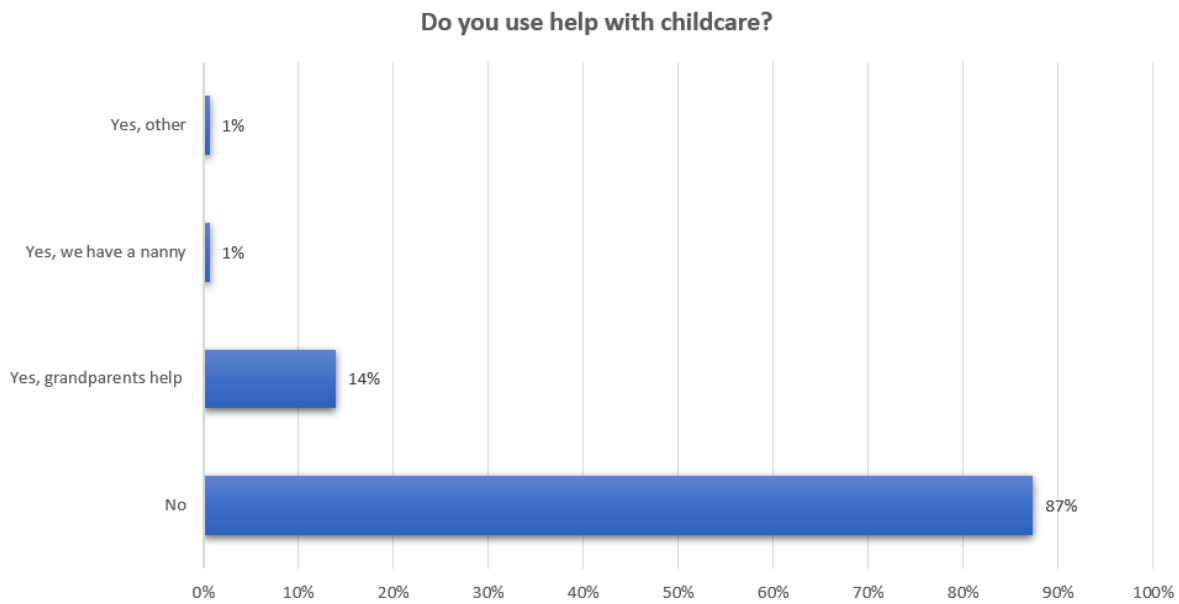
How has the current situation changed the way you spend time with your children?	
Spending more time together, more joint activities than before (reading books, board games, manual activities, conversations, cooking together, crossword puzzles, watching movies, creative games), positive feelings about the impact of restrictions on the amount of time spent with children	51%
More time spent learning and educating the children	15%
Nothing or little has changed	10%
The need to combine work with childcare, less „free” time, more responsibilities, private life is mixed with professional life	8%
All the time spent at home with children 24 hours a day	6%
Spending time only with family members, limiting social gatherings	5%
It is difficult, more frequent conflicts, tensions, a lot of time at home, boredom, being tired of each other	5%
Going out less	3%
Children play computer games, watch movies more	2%
No rush	1%
Involving children in housework	1%
More physical closeness (hugging)	

Source: own elaboration.

DO YOU USE HELP WITH CHILDCARE?

The vast majority of the families participating in the study (87%) do not use any form of help with childcare. A much smaller group are helped by grandparents (14%), employ babysitters (1%) or use other firms of help with childcare (1%).

Figure 4. Parental use of help with childcare



Source: own elaboration.

THE SITUATION OF CHILDREN

HOW DO CHILDREN REACT TO INFORMATION ABOUT THE EPIDEMIC FROM THE MEDIA?

The majority of children – aside from those who are too young – notice and understand the subject of the epidemic. There are two strategies emerging that are used by parents who have to face this subject with reference to their children's situation. One of them is an open conversation with their children, answering their questions and explaining that an infectious disease has appeared, as a result of which everyone has to follow extraordinary precautions. The second strategy (used particularly when the parents notice their children's fear and anxiety caused by the information) is to limit access to information in the media and filter the information through the parents who e.g. review the news only once a day when the children are asleep. The majority of children understand the necessity to introduce restrictions at home and outside and follow them. They understand it is a temporary requirement and concerns all people.

DO CHILDREN HAVE THEIR OWN MOBILE PHONES, COMPUTERS AND LAPTOPS?

Over half of the children from the sample (56,3%) have their own mobile phones while a little less than a half (45%) have computers at their disposal. It is important with regard to the fact that when online learning is required, all family members working and learning online need access to their own work device, in this case a computer or a tablet. Consequently, information that 45% of children have their own computers simultaneously means that 55% of children in the families from the research sample are unable to work on the tasks sent by teachers in real time or have to share the computer

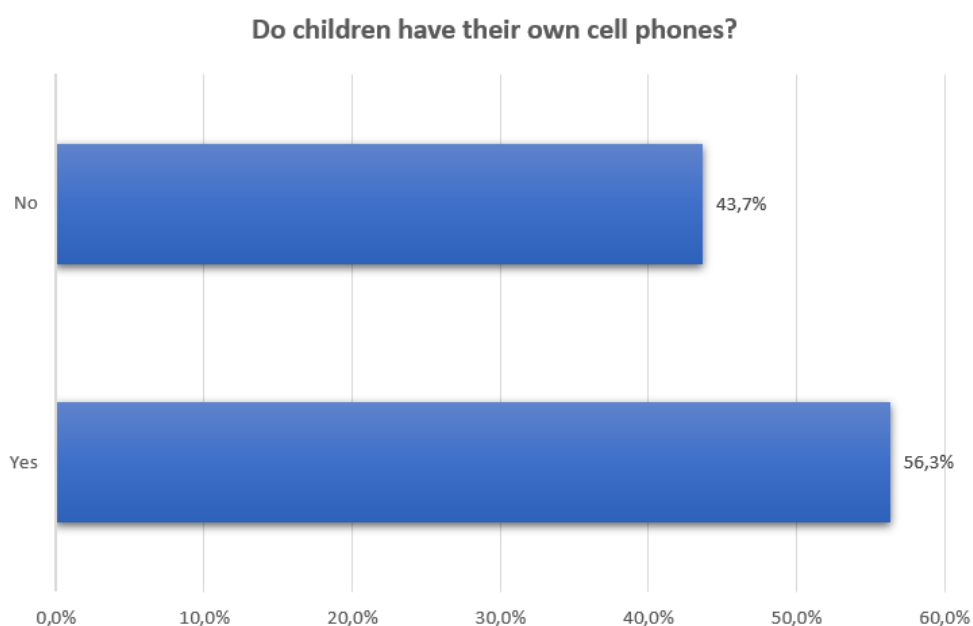
with their parents (who also frequently work online) and their siblings.

Table 4. Children's reactions to information about the epidemic from the media

How do children react to information about the epidemic from the media?	
They are afraid, anxious	23%
They ask questions, talk about this subjects with the parents	20%
With interest (they want to know what is happening and understand the mechanisms of how the virus works, they follow the trends in infections and deaths, they ask why they differ in different countries)	18%
With calmness and understanding	16%
Lack of interest in the subject on children's part	14%
Limiting the news (and the media) by adults to avoid burdening the children	11%
Too young to understand	5%
Rebellion against restrictions, irritation, anticipating the end of the situation	4%
Too much information about the virus, avoiding information when it appears (initiated by the children)	3%
With sadness	2%
They do not realise the gravity of the situation	1%
The subject of the coronavirus appears when playing games	1%
Trust towards public services	1%

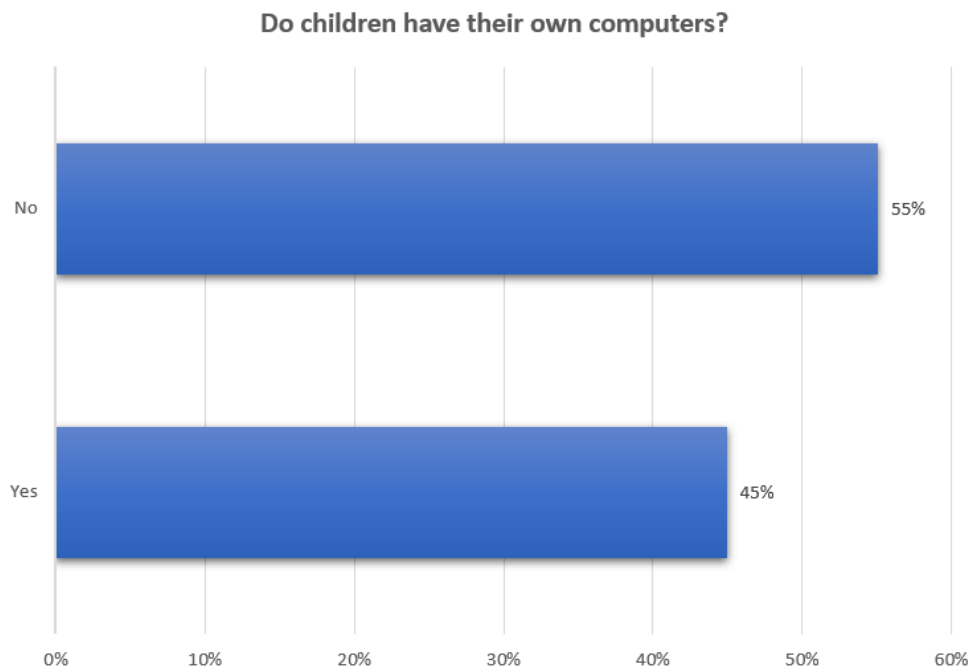
Source: own elaboration.

Figure 5. Do children have their own cell phones?



Source: own elaboration.

Figure 6. Do children have their own computers?



Source: own elaboration.

HOW DO CHILDREN FOLLOW THE SCHOOL CURRICULUM?

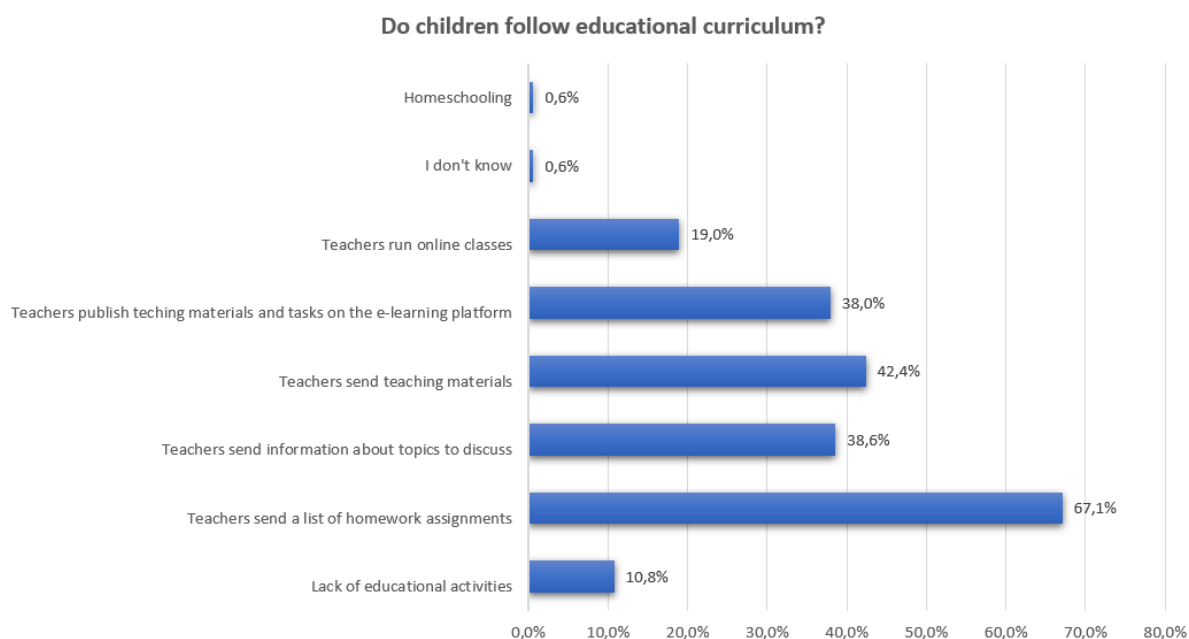
Despite the fact that schools have to conduct online education, this regulation is a dead letter in many schools in the country due to lack of digital competences and lack of access to adequate software and hardware both on the part of teachers and learners. Unlike many more computerized countries, Poland lacks significant experience in implementing distance learning in the structure of public schools, so using online work technology is a new task for much of the school staff, while for many it is a completely new and uncharted territory (apart from using Librus e-teacher diary). As results from the parents' account, many teachers conducts online education by sending a list of homework assignments to students (67,1%) and sending information to the parents about topics to be discussed with their children (38,6%). Situations in which teachers send didactic resources to the students (42,4%) or publish tasks on e-learning platforms (38%) are much more rare. Conducting live online lessons with the class is the rarest form of distance education.

CAN CHILDREN GO OUTSIDE IN THE PRESENT SITUATION?

The majority of parents declared that children could leave the house only accompanied by an adult caregiver (49%), while 23% of the parents do not allow their children to go outside at all. According to the parents' declarations, one fifth (20%) of the children can leave the house unaccompanied, however on 31st March 2020, a new government regulation was introduced limiting this possibility: underage children (under

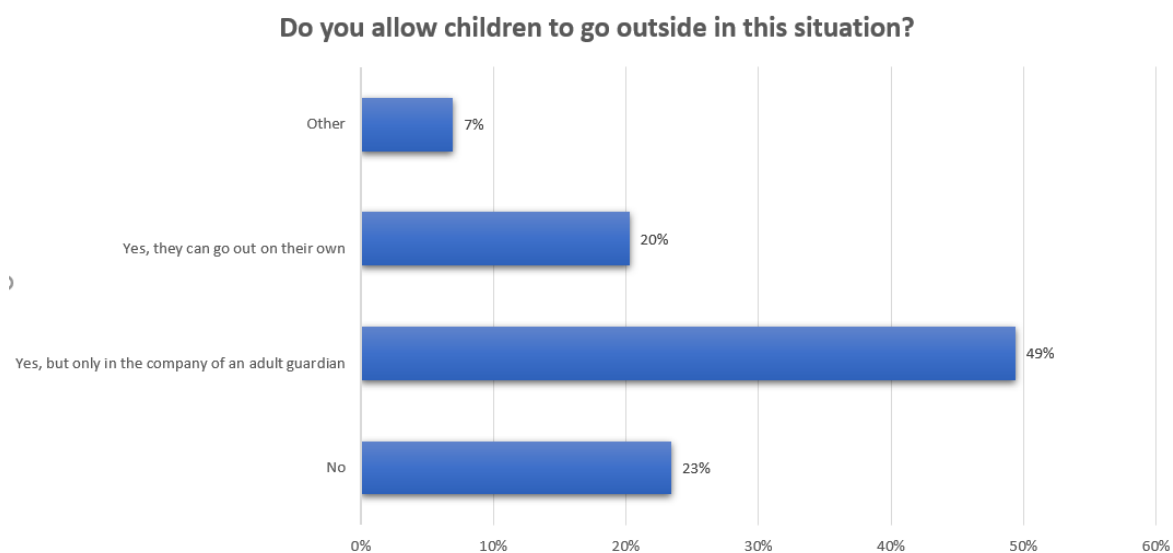
the age of 18) can remain outside only if accompanied by an adult caregiver.

Figure 7. Do children follow educational curriculum?



Source: own elaboration.

Figure 8. Do you allow children to go outside in this situation?



Source: own elaboration.

WHAT KIND OF SUPPORT WOULD YOU CONSIDER MOST NEEDED FOR PARENTS / CHILDREN IN THE CURRENT EPIDEMIOLOGICAL SITUATION?

According to one-third of the parents (28%), more efficient organization of remote teaching would be the most important support. This would involve conducting online

live classes, and not just sending tasks to be performed by children to their parents. In the parents' opinion, training for teachers in the use of digital tools would also be very much needed. In addition, parents drew attention to aspects such as psychological support that would help them understand how to deal with their own and their children's anxiety and how to explain to the children the requirements of the current situation and the restrictions imposed on them.

ADDITIONAL REFLECTIONS OF PARENTS

Among additional reflections provided by the parents prevail comments related to low digital competences and low implementation and use of technology both in the workplace and in the education system. This significantly hinders effective functioning in the situation of forced isolation and the necessity to stay at home. Some companies do not have procedures implemented for remote work, which means that employees are forced to travel to the company headquarters (this creates a problem with providing children with care and concerns about their health, possible infection and transmission of the virus at home).

A similar picture emerges from descriptions of cooperation with teachers. The parents' declarations show that most of the teachers (school and kindergarten) only send information about homework because they do not have the tools or competences to conduct 'live' classes, which would bring a number of benefits to students (direct contact with teachers and explanation of the material, possibility to keep in touch with classmates/groups and last but not least taking care of the child for a period of time, which would allow the parents to focus on work). There are voices suggesting that the implemented distance learning system should be top-down introduced by the authorities and adapted to the digital competences and equipment resources of parents, or educational institutions should be able to lend the necessary equipment (computers, tablets) to families in need free of charge. Unfortunately, to implement such solutions, equipment should be available and procedures should be developed for making it available.

CONCLUSIONS

The results of the study show the diverse problems faced by families in everyday life in the era of pandemic. The situation of children and the situation of parents who have been (without warning) ripped out of daily rituals and locked within four walls under one roof for several weeks is new to most of them. Despite widespread access to the media, information chaos can be observed causing a sense of insecurity among adults about the present situation and ways of coping with it. Information is directed mainly to adults by adults, overlooking the needs and perspectives of children. The media discourse lacks a safe space to inform all citizens, but who it particularly ignores are children and adolescents. Neither politicians nor journalists give children and youth a voice with their questions that would be answered by adults with competence and respect. Lack of information about whether secondary school final exams (Matura)

will take place is the most glaring example of violating the rights of adolescents in the chaos of the pandemic. Temporary closure associated with a number of restrictions on existing civil rights has moved social and professional activities to the virtual world and immured families in the “four walls” in which family members try to negotiate a new rhythm of everyday life together. It must be added that the research results refer to a very short period of time. New restrictions were introduced on April 1st in Poland and limited citizens’ liberties and freedom of movement. They particularly affected are children and adolescents under the age of 18, who are not allowed to leave homes unaccompanied by an adult. Only the company of a parent, legal guardian or another adult caretaker can justify their presence in the street. The adult respondents focused on their own situation and the situation of children in the family in the limited space and with limited mobility. Spatial limitations and the sudden necessity to shift to professional and educational functioning in the virtual world, accentuated the absence of or imperfections in the area of digital competences and time management.

Adults working online or in company offices combine full-time jobs with childcare and assisting their children in learning and homework assignments. This situation has detrimental effects to all parties involved. This challenge requiring new skills, time management and adequate technological resources has proved to be problematic. Remote work tools turned out to be an obstacle as well (insufficient amount of equipment, Internet access).

As far as interpersonal relations are concerned, both adults and children suffer from the absence of social contact. This refers to both meetings with friends and visiting the children’s grandparents (in the case of children – time spent with their peers from preschool or school).

The majority of the respondents did not report to have any strategy of explaining the present situation to their children. The parents declared that they informed the children about the situation and the necessity to maintain hygiene in an open and straightforward way, using simple words. Parents of very young children do not discuss the coronavirus with their sons and daughters. Some parents use fairy tales, metaphors or tales to explain the circumstances to their children in an accessible way, trying not to arouse fear. Of course, there were a few cases in which restrictions were imposed on children without any attempts to explain why they needed to be introduced.

Another aspect explored was to what degree the parents take into consideration/ are open to children’s participation in developing new rules of conduct adjusted to the new situation and to what degree adults impose the new rules of daily functioning on their children. Only a small percentage of the parents reported that such new rules had been introduced. An even smaller group of the respondents replied that the new rules had been consulted with their children. The imposed social isolation resulted in circumstances in which parents, spending far more time with their children, take on additional activities. For parents working outside their homes, the intensified time spent together is simultaneously a source of more stress and accumulation of problems. It is primarily connected with exhaustion and considerable investment in helping their children with online education.

Children's reactions to media information about the epidemic were an important aspect of the study. The parents reported that due to the omnipresent subject of the coronavirus in various media, they talked with their children, explained, and answered their questions. The second trend emerging from the parents' answers was to limit children's access to information about this sensitive subject to protect them.

The research results show the difficult situation – a situation that is new in every respect in families' daily functioning- both parents and children from our research sample have found themselves in. The questions “what, where and how” asked in the title of this article are not limited only to the dilemmas of adult-imposed prohibitions and orders within parents-children relations. These questions demand further exploration oriented towards the next stage of adapting to the difficult, unprecedented and simultaneously unpredictable situation in which extraordinary legal solutions should not lead to unjustified and arbitrary restrictions in rights, including the rights of children and adolescents that constitute a large part of Polish society.

ORIGINALITY/VALUE

Research can be helpful in understanding the situation of families with children in the age of pandemic that forced the reorganisation of family and professional life. The results show how the functioning of parents and children changed in the first phase of the coronavirus crisis, and what kind of help families would need most. The study can constitute a valuable source of information in creating adequate support mechanisms for families with children and developing recommendations for local authorities and educational institutions.

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PEOPLE AND THEIR PETS IN THE TIMES OF THE COVID-19 PANDEMIC

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ABSTRACT: In the face of a global pandemic, domesticated and companion animals are relegated to the most vulnerable stratification of society. Companion animals (pets) have been established as family members in a wide breath of cultures globally; thereby ensuring reliance on humans for maintaining care and wellbeing. Furthermore, those on social media are sharing animal stories, photos, memes, and videos as a mechanism of distraction, enjoyment, and humor. Animals are becoming the force to bring humanity together through crisis, and yet, they require human care and compassion. Amidst the COVID-19 pandemic, the world was confronted with three pertinent questions: 1. How do individuals provide physical and emotional care and enrichment for pets during a pandemic? 2. Are there zoonotic concerns in caring for a pet? 3. What are the mid- and long-term repercussions of the pandemic for pet care? To address these questions, this paper identifies avenues of support, and challenges that can be addressed in the midst of the pandemic to advance and ensure companion

animal welfare. This is the moment we collectively challenge the notion of companion animals as family members and the importance of these very animals in our lives.

KEYWORDS: COVID-19, pets, zoonosis, animal welfare, veterinary social work

INTRODUCTION

On March 11, 2020, the World Health Organization declared COVID-19 a world-wide pandemic (World Health Organization, 2020); which has created situations that are unprecedented in the past 100 years. Situations of psychological crisis are defined as ones that force change of previous behaviour as old patterns become inadequate for reality and its requirements. In the face of pandemics, priorities get redefined. Self-preservation instinct dictates behaviour aimed at individual welfare. In such situations the weakest social categories are mostly exposed to danger and they are most vulnerable. Representatives of these categories have either limited or no means to protect themselves, therefore their susceptibility to harm and injury is the highest.

All humans are vulnerable to the novel corona virus, making its spread a universal and global concern. About a month later, the novelty of life with COVID-19 still clings to the corners of daily life. As of this writing, the central directions for dealing with the virus and the disease COVID-19 include social distancing, staying at home, washing your hand and practicing good mental and physical health habits. Routines of work and recreation have all but ceased as people try to comply with the public health guidance. The international community has begun to settle into a routine of social distancing and working from home – with millions of pets by our collective sides.

In western cultures of the 21st century, domesticated animals are arguably the weakest social stratification. As non-linguistic, sentient beings, they have minimal opportunities to protect their own interests. In the current anthropocentrically dominated world animals depend on people. As Donaldson and Kymlicka state in *Zoopolis* (2011) non-human animals should be treated as citizens of human societies because they have been included by people against their will. This becomes particularly apparent in situations of crisis which usually lead to depletion of resources, thus resulting in shortages. Pets are more than companions, they are family. Yet, they cannot help pay the bills nor can they resource their own food from inside the shared home – especially during a shelter-in-place order.

The Center for Disease Control issued a statement early on that pets are not susceptible to COVID-19. Though there are a number of strains, the specific virus that is wreaking havoc on people does not “jump” to, nor from domesticated pets (Center for Disease Control and Prevention 2020). Herein is the prime situation for animal bonding – people are turning to pets in the home and social media for catharsis that people cannot get from typical social interactions at this time. With daily life moving indoors, people are taking to social media as a communication tool. Social media posts about animals in natural habitats, and not so natural habitats abound as a mechanism of detaching from stress and finding enjoyment in others. Species that adapted to noc-

tural behaviours to accommodate human cycle have become more visible in cities as they return to their natural preferences (Forbes 2020; Podlaskie 2020). In Italy, people were so thrilled to see the positive impact of their home-stay that a photo of dolphins in the canals of Venice were hard *not* to believe (National Geographic, 2020). Though false and exaggerated stories abound, there is plentiful truth and hope to be found as well. Animals on social media are evoking happiness, humor, and compassion: therapy dogs visiting nursing homes through windows (Today 2020) and supporting emergency room doctors (CNN 2020), to parrots demonstrating behaviors that make people laugh (YouTube 2016).

In the United States, many communities have found that the mandatory shelter-in-place has created a pseudo-parental-leave situation, affording time to welcome a new family member into the home. Move over toilet paper, make room for adoptions and fosters! As shelters began to see an influx of surrendered pets, economic hardship, and inability to maintain staffing due to place sanitary conditions and shelter-in-orders, people heeded the call to action and opened their homes to fosters and adoptions (Maddie's Fund 2020). Animal protection societies and shelters have reported simultaneous increases of relinquished and abandoned animals, and applications for foster care after the start of the pandemic in the United States (Localsyr.com 2020). Shelters have reported 100% increase in foster home applications, while other shelters have seen record adoptions (ASI 2020).

The way humans choose to engage and interact with each other, and with our pets in times of crises demonstrates our dedication to humanity. Innately, humans seek to support each other, find comfort in shared moments, and demonstrate acts of compassion. As people social distance from each other, companion animals/pets become core support systems for physical and emotional wellbeing.

CONCERNS OF PEOPLE WITH PETS

Companion animals are generally thought to enrich the lives of humans- regardless of what is happening around them. Living with animals and including them in daily routines is linked with various benefits: social interaction, exercise, emotional supports and social connectedness. Chandler (2019) outlines eight domains of pet-owner wellness: emotional and physical nurturance, sense of family, sense of responsibility and purpose, friendship/companionship, social interaction and connections, personal values/spiritual values; fun and play and physical health. Each of these eight dimensions would be affected by the risks presented by the Coronavirus and COVID-19, by social distancing and social isolation responses and the social and economic disruptions associated with the pandemic. Pets react to changes in their social environment and to the emotional state of their humans.

Wood, Martin, Christian, Nathan et al. (2015) studied the impact of pet ownership on social networks and social relationships. Pet owners reported they were able to interact more readily with others in their neighborhoods and that these interactions resulted in supportive relationships and new friendships. Their conclusion was that pet ownership might result in higher levels of social interaction and healthier neigh-

borhoods. Strong social, neighborhood networks could provide added support and tangible resources to those coping with the limitations of shelter-in-place orders as well as those who are more vulnerable because of age or health conditions.

While the COVID-19 pandemic is unique, past disasters have raised concerns provide some insight about the welfare of companion animals during times of crisis. First responders during Hurricane Katrina quickly learned that rescue efforts had to include pets when many people refused to leave their pets behind; quickly endangering their lives and the lives of others (Zeitlin 2019). Disaster planning experts have since recognized that companion animals must be included in disaster planning and have issued preparedness advice (Federal Emergency Management Agency 2019; Chadwin 2017). Though COVID-19 is not a natural disaster, there is an imperative need for public health guidance inclusive of implications for companion animals and the humans with whom they live.

DISEASE SUSCEPTIBILITY AS A ZOO NOTIC DISEASE

One of the first concerns to emerge with Coronavirus and COVID-19 was about the susceptibility of pets, and the likelihood that the disease could be spread by human-animal contact (Goumenou, Spandidos and Tsatsakis 2020). Although there is some suspicion that COVID-19 originated from bats (Millán-Oñate et al. 2020), and is therefore considered a zoonotic disease, infectious disease experts and multiple international and domestic human and animal health organizations do not believe that companion animals can spread COVID-19 to other animals or people at this time (AVMA 2020). At the time of this publication, two dogs (Hong Kong) and one cat (Belgium) that were in contact with COVID-19 infected humans have been reported to test positive for COVID-19. It is likely that these animals were contaminated with the virus, and while this indicates that dogs and cats can become infected, it is unlikely that the virus leads to clinical signs or propagates enough virus to lead to transmission (AVMA 2020).

Additionally, porous surfaces such as pet fur may not transmit the virus as easily as nonporous smooth surfaces (AVMA 2020). Idexx, a veterinary diagnostic laboratory, is currently developing a veterinary-specific COVID-19 PCR test. To date, over 4,000 animals from areas with COVID-19 positive humans have been screened, and all results have been negative (Idexx 2020). Interestingly, the conversation was focused immediately on whether people could contract the virus from their pets, not whether people could *give the virus* to their pets.

While there is no current evidence that companion animals succumb to clinical disease from COVID-19 or transmit it onto others, further research is warranted and ongoing. Until more information is known about COVID-19 in companion animals, it is prudent to minimize the risk of spread. Prevention of spread of COVID-19 is no different from the precautions that are taken with any other zoonotic disease, with the most critical practice being rigorous handwashing. In addition, the mandate of social distancing during a pandemic is important. Dogs should keep distance from other dogs and people and should not be exposed to high density areas such as dog parks and daycare facilities. Extensive travel with pets should be significantly limited to

minimize transmission (Anderson, Stull and Weese 2019). These hygiene and preventive practices are especially important for both for pets who are immunocompromised and pet owners who are immunocompromised (Grant and Olsen 1999).

ECONOMIC AND CARE BURDEN

The extent of the economic impact of Coronavirus and COVID-19 is yet to be determined, but many people have lost their jobs and income as a result of efforts to “flatten the curve” by shutting down all but essential businesses (Oliver 2020; Specktor 2020). For some the added costs of caring for an animal during economic hardship may lead to relinquishing the animal at a shelter. The uncertainty about the fate of the economy and the financial concerns may outweigh the relationship and bond between some humans and their companion animals. For others, daily routines of care, rather than the expense of the animal during times of social-quarantine or social isolation prove to be too great a burden and result in relinquishing the animal to a shelter.

CHANGE IN ROUTINES

Shelter-in-place orders have altered the daily routines for most United States residents. For many, these orders mean more time to be with their pets and to enjoy interactions with them. There may be more opportunities for walking and playing outside using appropriate social distancing behaviors. Overall, there is likely increased contact during the day.

After the Spanish government-imposed restrictions on leaving the home, Spanish social media humorously suggested walking a plush stuffed dog on a leash was in accordance with the rules: “You can walk a dog. Any dog” (Daily Mail 2020). Humour aside, those who are quarantined and cannot not leave the home may need to explore opportunities to re-train their pets, predominantly dogs and indoor/outdoor cats, to relieve themselves in a designated inside location (Lowrey 2020). This alteration in routine and impromptu training will no doubt be confusing for both person and pet. Working from home also brings changes in the ways in which people and pets interact. Pets do not understand the need to stay away, or stay quiet during conference calls or virtual meetings. However, the occasional cat across the screen, or arm bump by a dog is a nod towards silver linings and an opportunity for humor as people reconnect in this new context.

Compassionate humans will devote adequate time to their companion animals to compensate for the work-related separations. Pets and people experience boredom when experiencing diminished stimulation. Domesticated dogs and cats require stimulation of play to alleviate boredom and stress associated with social isolation and/or quarantine (Lowrey 2020); since people benefit from play as well, it is mutually beneficial to carve out daily time to engage. A similar attempt to address the needs of animals, specifically their need for play and enrichment, is changing their physical environments. At the Shed Aquarium, caretakers allowed the penguins to wander the grounds of the oceanarium in the absence of visitors (CBS News 2020). Revisiting the

pull towards social media, zoos around the world have been livestreaming animal play, new births, and lunch-time musings.

VULNERABLE GROUPS

Older people and those with underlying chronic illness have been deemed more vulnerable for COVID-19 than others. These vulnerable groups may need additional supports to shop for food and supplies for their pet. They may also need communication (e.g. reminders) or physical support to walk and play with their pet(s).

For immunocompromised persons living with pets during a pandemic, the goal is to keep the person with his or her pet in a healthy and mutually beneficial relationship that presents minimal risk to both human and animal. Non-profit programs called human animal support services exist to provide financial, emotional, educational, and practical assistance to disabled or immunocompromised pet owners (Gorczyca, Fine & Spain 2006). Routine pet ownership practices that immunocompromised people may not be able to safely carry out such as walking, grooming, scooping litter boxes, and administering medications are provided daily by volunteers. However, it is important that volunteers that enter these homes follow appropriate protocols such as social distancing and hand washing to not put themselves or the people who are served at risk.

Communities with pet owners are working collaboratively through neighbourhood initiatives to walk the dogs for those who are in quarantine (Metro 2020). Using drones for dog walking is among new, possible suggestions on how to tackle the challenge of quarantine with a pet who routinely accesses outside spaces (TurnTo23 2020). Training is still required, as are measures for safety, but it is a creative solution to a current world-wide challenge. Dogs' needs to get outside have been met by allowing them outside through windows and balconies. However, stories of physically lowering dogs by a leash from a second-floor balcony seems far less safe as such actions may seriously endanger animals' health and welfare (NY Post 2020).

The risk of becoming ill with COVID-19 and having to be hospitalized can create additional stressors on homeless people with pets. Any single person with a companion animal will experience added stress unless there is a clear plan for the animal's care in the face of extended illness and/or hospitalization. The Humane Society (2020) offers resources for homes with pets, opportunities to foster/adopt, and preparedness plans in the event of illness.

People who experience homelessness have been shown to have strong bonds with their companion animals, but the presence of the animal can limit access to shelter services as well as to deter any help if there is a fear the animal will be taken away (Cleary et al. 2019). The human service and animal welfare communities have responded to the need for guidelines, resources, and support by quickly developing and sharing resources for keeping humans and animals together in wellness. My Dog is My Home (2020) and the Co-Sheltering Collaborative (2020) have put forth guidelines for helping individuals facing homelessness, and individuals serving those who are experiencing homelessness, stay with their pets.

ANIMALS ASSIST IN TIMES OF CRISIS

Companion animals provide comfort at all times and especially during times of crisis. It is the unconditional support of animals that many cite as the primary ingredient for the success of animal assisted interventions and animal assisted programs. Research has shown that companion animals provide emotional support for adults with mental health challenges (Brooks et al. 2018), for adolescents (Jones, Rice & Cotton 2019), and for older adults (Bibbo, Curl & Johnson 2019). Human-animal interaction is beneficial and desired by immunocompromised individuals, but certainly not at the risk of their own physical health (Chan & Rico 2019). Therefore, any animal-assisted intervention programs should be ceased during pandemics.

However, it stands to reason that pets will be a source of support during the pandemic and during the many societal and economic changes to follow. Animals have been introduced to crisis work by way of crisis response teams. These human-animal teams provide additional resources to clergy, social workers, and other health care professionals reaching out to people affected by crisis (Greenbaum 2006). In addition to the more common collaborations in psychotherapy, animals will be vital collaborators for supporting human-wellbeing as society seeks to alleviate the burdens of the effects of this pandemic.

CONCERNS FOR THE WELLBEING OF PETS

One construct to ensuring animal welfare, even during a pandemic, is to ensure the five freedoms: the freedom from hunger and thirst; freedom from discomfort; freedom from pain, injury or disease; freedom to express normal behavior; and freedom from fear and distress (FAWC 2009). To attain freedom from pain, injury, and disease, proper veterinary care is essential. Veterinarians are on the front-line to ensure the health and wellbeing of both pets and animals.

PROVIDING VETERINARY CARE

During a pandemic, it can be challenging to maintain the physical health and wellbeing of companion animals, especially when other life needs may need to be prioritized. Veterinary hospitals are considered essential businesses for emergency care for animals. Veterinarians receive regular guidance from organizations such as the American Veterinary Medical Association on how to operate during these times of uncertainty (AVMA 2020).

However, veterinary hospitals may struggle to remain open as they are faced with the same, if not more risks and challenges as the general public. Veterinary staff may be at increased risk of exposure because of the close contact that is often required between veterinary staff and clients. Additionally, animal patients may be vectors of zoonotic disease transmission, although there is no evidence that domestic animals can transmit COVID-19 to other people or animals at this time. There is evidence that veterinary staff employees may not be as diligent with zoonotic disease prevention under normal circumstances (Wright et al. 2008). These added risks may result in re-

duced staffing, as employees can elect self-quarantine and choose not to work during these periods. In addition, hospital supplies such as medications and personal protective equipment may be on short supply during these times, as they may not be aware. These factors, coupled with a decreased caseload, make it difficult for veterinary hospitals to safely remain open and profitable.

Veterinary caseloads should be limited to emergencies only with limited direct contact between the veterinary team and the pet owner. If the animal is due for an annual wellness examination or other elective procedure, this may be delayed. Depending on the life stage of the animal (Bartges et al. 2012; Vogt et al. 2010), it is unlikely that a delayed visit to the veterinarian for preventive care will negatively affect the health of the animal. Under most circumstances, adult animals that are overdue for vaccinations should not pose an issue (Ford et al. 2017; Scherk et al. 2013). However, animals that are either very young or very old may be considered immunocompromised, and it is important that these animals receive appropriate attention and vaccinations as advised by their veterinarians. One of the most important preventive measures pet owners can take in preventing infectious disease in their pets is maintaining appropriate social distance.

As pet owners spend more time at home during the times of social distancing, they may notice abnormalities in their pets that are typically not observed because they are not together as frequently. Subtle abnormalities or behavior changes may be more apparent and cause a pet owner to contemplate whether or not this is considered a true emergency to warrant physically going to the veterinarian.

For these types of issues, veterinarians are making telehealth more readily available to clients (Roca and McCarthy 2019). While the consultation does not take the place of a formal face-to-face physical examination, the veterinarian may determine he or she has enough virtual information to make a proper assessment and recommend an appropriate treatment plan. This method may alleviate much stress for the pet owner who is unable to physically go to the veterinary hospital. However, an appropriate veterinarian-client-patient relationship must be established according to state and federal guidelines prior to a formal telemedicine consultation. This stipulation underscores the need for all animals to receive regular preventive veterinary care with a licensed veterinarian prior to a pandemic.

Pets suffering from chronic disease are at risk of not receiving the care they need during a pandemic. These animals often require frequent recheck appointments for assessments, diagnostic tests, treatments, and prescription refills. Telehealth is readily available to meet the needs for assessments, especially since veterinarians have a pre-existing relationship with the pet. However, diagnostic tests and treatments require the animal to be present in the veterinary hospital. Collection of samples for diagnostic testing and routine treatments such as rehabilitation, bandage changes, and wound management that must be done in the hospital setting by veterinary professionals may be permitted on a case by case basis. Prescription medications may be filled using electronic prescribing through a local or remote pharmacy. It is critical that pet owners understand the indications for prescription medications, the consequences of not having the medication, and what to do in the event that a prescription

is unable to be filled in time. Proper knowledge and consultation with the veterinarian may lead to improved planning to prevent these instances from occurring.

PALLIATIVE CARE AND HUMANE EUTHANASIA

A significant emotional challenge in providing high quality veterinary care during a pandemic is caring for animals requiring hospice and palliative care and for those that are subject to humane euthanasia. End of life care and euthanasia require a great deal of attention from the veterinary team to both the animal as well as the pet owner. This can be a challenge with limited resources, limited time, and barriers to physical contact where social distancing is mandated. In addition, pet owners are already in a heightened emotional state due to the circumstances of a pandemic, which may exacerbate the emotions processed when contemplating the decision of euthanasia and processing the grief from the loss of a pet (Bishop et al. 2016). While the assessment of quality of life for the animal and discussion of euthanasia may be conducted remotely between veterinarian and pet owner via telemedicine, the physical act of euthanasia requires direct contact (Underwood and Anthony 2013).

The grace of euthanasia relies on a bonded veterinary-client-patient relationship, as the growing majority of pet owners elect to be present during a euthanasia (Dickinson, Roof and Roof 2011). The most ideal circumstance would be for the euthanasia to be conducted in the home setting, but this may be an unrealistic practice during a pandemic. Therefore, if a euthanasia is warranted and the pet owner wishes to be present, advanced planning is required to ensure the process runs as smoothly as possible to minimize the risk of transmission of infectious disease. The International Association for Animal Hospice and Palliative Care (2020) has released practice guidelines for veterinary services that are transparent for clients. Social distancing, the lack of direct contact, overzealous disinfection practices, and uniforms of personal protective equipment worn by the veterinary staff can create a cold and impersonal euthanasia experience. Thus, conversations that explain procedures offer transparency in this highly emotional time. The pet owner needs to understand that these practices are in place to guarantee the safety for all participants. Employing a veterinary social worker or other mental health professional to coordinate and be present for the euthanasia may improve the experience for the grieving pet owner.

REPERCUSSIONS OF THE PANDEMIC FOR COMPANION ANIMAL CARE

Living in the state of pandemic creates an unavoidable realization that caring for a pet quickly becomes a challenge. For people who have a lower threshold of psychological resistance, or for those who have a lower level of empathy, the instinctive, psychological response may be to reduce stress in their life. In pet ownership, addressing stress in this manner may look like surrendering a pet to a shelter, or relinquishing a pet to a veterinary clinic requesting euthanasia (Vice 2020). Pet who belong to people without appropriate financial means may be abandoned; either by the notion that they have better odds to find food and resources out of the house, or that the person cannot lon-

ger serve as a caretaker. This solution is sometimes consciously used by people who do not want to kill an animal, but cannot conceive keeping them either. Being helpless, animals experience the deception of abandonment in a place from which it cannot return home (Mondelli et. al. 2004; Dog Population Management 2011). The current pandemic has raised international concerns of a higher probability of euthanasia of animals in zoological gardens (BBC 2020), and animal shelters (Independent 2020).

When confronting a major crisis, people tend to follow the basic instinct to preserve their genes, concentrate on satisfying their own needs and the needs of their nearest kin. Thereafter, people look to the community around them. The fundamental question arises here – which category do pets belong to? And, what about non-domesticated animals?

While some pets are treated as family members, other animals are kept by people in environments where care and enrichment is delegated. The needs of animals kept for entertainment, for example in zoos, become of lesser importance. History has demonstrated that this stratification of animals can result in tragic situations of killing zoo animals (Baratay, Hardoui & Fugier 2004; Prenger 2018). Discussions regarding the treatment of livestock and farming animals has been far removed from the conversation about animal welfare and COVID-19. In large part, this is due to the belief that animals for slaughter are not as deserving of care and compassion as those in the home.

Of the same notion, as consumers of meat products, humans are remiss *not* to consider livestock treatment. In essence COVID-19 may be an iteration of history will be repeating prior health crises (e.g. H5N1/avian flu, Creutzfeldt-Jakob Disease/Mad Cow Disease, and SARS-CoV). The COVID-19 virus is strongly postulated to have originated from animals, and was transmitted to humans by consuming meat and animal products. Tilocca et. al (2020) found that previous contact with the virus may provide a partial/basal immunization that shields humans against circulating COVID-19.

It would be advisable not to blame animals for the outbreak of the epidemic. After all, it has been human activity that led to catastrophic consequences. “Wet markets”, which provide minimal space for a variety of species with no veterinary supervision, pose a robust sanitary threat. As noted by the prior zoonotic outbreaks, it is often the unnatural consumption of animals that instigate health crises. The relationship of the present health crisis is illustrated by an internet meme, in which “carnivorous” and “coronavirus” (i.e. COVID-19) is an anagram (PETA 2020). While the actual cause of COVID-19 has not formally been stated, the relationship between people and pets, as well as people with non-domesticated animals is truly the central conversation.

Any individual interested in finding a cure and treatment for COVID-19 would be remiss not to account for the animals serving humans in the medical field. The medical community utilizes “animal models” to test potential antidotes; a technical term for live animals to simulate human genome. strives to create a treatment for COVID-19. Thus, it is not an ideal time to be a lab mouse, unless martyrdom is of interest. The current use of animal models is imperative to the health and wellness of humankind, and yet, we too must recognize the value of animals serving humans to ensure this pandemic shall pass (Sentient 2020).

CONCLUSION

For some animals this pandemic may be the opportunity to be adopted (NY Times 2020), while other animals may be less fortunate and may not survive the pandemic with their family intact. More importantly, people must prioritize domesticated animals as family and ensure that, to the best of our collective ability, their needs are met. For the majority of animals increased presence of people at homes is a major, positive environmental shift, particularly for those (especially dogs) who will normally stay in the house alone, while their carers go to work.

The impact of the COVID-19 pandemic will not be known for some time. As Dr. Amy Acton of Ohio said, “We will be looking back at this for years and years. There will be history books written; this truly is that once-in-a-generation, every-hundred-year experience, and we’re going to learn so much as a country” (News5 Cleveland 2020); and world-wide. Our companionship with animals has survived thousands of years, and several pandemics. We will move through this together.

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BIOGRAPHICAL NOTE

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LIMINALITY: BLACK DEATH 700 YEARS LATER. WHAT LESSONS ARE FOR US FROM THE MEDIEVAL PANDEMIC?

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ABSTRACT: Black Death, global plague of the 14th century deeply changed the society of Medieval Europe. This unexpected catastrophe killed from 30 to 60 per cent of the continent's population remaining the most deadly of all known wars, epidemics or natural disasters up to date¹. It was an impulse to a profound transformation of European society, religiosity and art that opened doors for the Renaissance. Time of the catastrophe had a clearly liminal character, well described in Boccaccio's *Decameron*. It is far too early to predict the COVID-19 pandemic's impact on the world in long-time perspective, as we know little about how and when the disaster will end, but mechanisms of the liminal period are already to be seen and can be described, so is the influence of the virus on global economy, mobility, culture. There are similarities even in human reactions – from the hostility towards Asians (pogroms of Jews as a reaction to the Black Death) to 'corona-parties' (similar to the plays described by Boccaccio).
KEYWORDS: pandemic, Black Death, mobility, social structure, religiosity, liminality

¹ In percentages, not real numbers. 2nd World War took more lives, but Europe's population was much bigger then. We must be aware however, that even greater percentages of people died of contagious diseases that appeared in both Americas when European colonists transported unknown pathogens to new populations (like the plague of smallpox from 1520 in Mexico).

...There came the death-dealing pestilence, which, through the operation of the heavenly bodies or of our own iniquitous dealings, being sent down upon mankind for our correction by the just wrath of God, had some years before appeared in the parts of the East and after having bereft these latter of an innumerable number of inhabitants, extending without cease from one place to another, had now unhappily spread towards the West. And thereagainst no wisdom availing nor human foresight (whereby the city was purged of many impurities by officers deputed to that end and it was forbidden unto any sick person to enter therein and many were the counsels given for the preservation of health) nor yet humble supplications, not once but many times both in ordered processions and on other wise made unto God by devout persons, about the coming in of the Spring of the aforesaid year, it began on horrible and miraculous wise to show forth its dolorous effects.

Giovanni Boccaccio, *Decameron*

INTRODUCTION

Current coronavirus pandemic outbreak may seem to the public opinion exceptional and coming out of a sudden. It might be so because there is no more communicative memory (Assman 2008) of the Spanish Flu of 1918-2020, that took an estimate number of 24.7 to 39.3 million lives worldwide and over half a billion cases of infection (Patterson and Pyle 1991: 15). In fact regional and continental plagues repeated regularly in the human history. Of them first mentioned was the great plague of Athens in 429 BC. Thucydides wrote (1988), that it started in Ethiopia and reached Athens through Egypt. No cure was known to medics and what helped ones, worsened situation of others. Greek historian ads, that the plague came from Ethiopia, which suggests that he was aware of its natural not supernatural provenance, but at the same time he recalls a hypothesis, that it was caused by the poisoning of wells by Spartans, who were in war with Athenians at that time (Naphy and Spicer 2004:7).

Later came the plague of Antonine (165-180 AD), plague of Justinian (541-542 AD), the Great Plague of London (1665-1666 AD) and many other deadly catastrophes to which mankind had no cure nor explanation. But none of the historical epidemics nor pandemics has caused such a long term cultural and social transformation as the Black Death in 1347-1350². Being conscious of very changed conditions, it seems possible, that the current COVID-19 pandemic has a potential for a similar impact, not even becoming equally deadly.

It is difficult not to point out certain similarities between the Black Death of the 14th century and the COVID-19 pandemic of 2019-2020. In both cases it originated in China and through Italy was brought to Europe. Both diseases were unexpected and both changed completely the way of living, human behaviors and attitudes. It can be interesting to compare the two cases with all respect to changed civilizational condi-

² The Plague originated in Central Asia before 1346 and ended globally after 1353, but years 1347-1350 are often given as the outbreak of the pandemic for Western Europe.

tions and scientific knowledge.

The spreading of disease shows how the world changed in its mobility over centuries. The Black Death started in late 1330-ies somewhere in central Asia or China. It was preceded by a period of famine. In 2017 a group of archeologists working on three Nestorian cemeteries near the lake Issyk-Kul in Kyrgyzstan confirmed that the reason for some people's death in 1338 and 1339 could be the Plague (Slavin 2019) with suggestion, that it was the same disease that later spread to Europe. All this area was then dominated by the Mongols, who although already divided to several khanates, enabled faster distribution of goods and people throughout the area with renewal of the ancient Silk Road. The disease appeared in Europe through Italian-kept Crimean city of Caffa. When the Mongols besieged the city they were outnumbered by the plague. Before giving up the siege, they decided to catapult dead corpses of their own warriors who died of the illness (Barras and Greub 2014: 498). As an aftermath of this Mongol-Genoese war for Caffa, Black Death was taken to Europe on board of Italian ships crossing the sea to Messina and then some other ports on the Mediterranean. The year was 1347. The disease then spread across the continent, reaching Genoa and Venice in early 1338, papal see in Avignon in summer same year, England and Scandinavia in 1339 and finally Russian states in 1351 (Gottfried 1983: 76).

It is quite easy to calculate, that in the 14th century the Plague needed 4 years to reach all corners of Europe and more than a decade to cross the Silk Road, ravage Europe and appear in the East of the continent. To compare, the Spanish Flu second outbreak in 1918 needed time from early August 1918 to late January 1919 to reach almost every inhabited place on Earth, sparing only few remote islands in the Pacific (Patterson and Pyle 1991: 11). Novel coronavirus in 2020 did the same in less than 3 months.

Therefore what is a finding about both pandemics, the historical and the one happening in front of our eyes? We are connected, but some of us are connected more. Observing the map of the destinations that the virus reached in the first place and those to which it arrived later, it is clear, that the pandemic hit earlier in the rich, developed countries of the northern and western hemispheres (Western Europe, the US) and later arrived to less globalized areas like central Asia, South America or Africa. These regions, as on 26 March 2020, have still much less reported infection cases and causalities. When analyzing Poland alone, most cases happened to develop in big cities or more central regions. Less developed and sparsely populated Podlasie voivodeship for a number of days was free of infection and later remained the least affected part of the country.

People in the Middle Ages attributed the disease to God's will and explained it as "contaminated air"³ (Głowiński and Kościak 2013). They searched for answers about

³ The vision of contaminated air remain very strong in popular imagination. In the Polish religious hymn from 18th century, „Święty Boże, święty mocny...” (*supplication* – from Latin *supplicatio*: request, supplication – has a very long tradition in Christianity, reaching at least as far as 4th Century AD. See: Mika 2008: 151) we read a sentence “od powietrza, głodu, ognia i wojny... wybaw nas Panie” (*from air, hunger, fire and war... save us Lord*). Air, that is contagious plague, was mentioned in the first place.

the origin⁴ and future of the Plague in the Holy Bible, where they found that the most probable reason of their tragedy was God's wrath for their sins. They also observed the epidemic as an announcement of the Apocalypse⁵. Hence, the adequate reply to the disaster were fast, penance and prayer. Today, in 2020, scientists quickly provided rational theories about the origin of the virus⁶, but still there is a great number of conspiracy theories – from the one describing the pandemic as an effect of intentional or accidental releasing of the virus from a Chinese (or American) laboratory⁷, to perceiving the disease as the beginning of the Doomsday⁸. We see that sometimes the way of thinking of men is not that far from the 14th century as we would like to think.

This article's objective is to highlight several similarities between the Black Death of the 14th century and the COVID-19 pandemic of 2019-2020. Despite a huge technological, mental and socio-cultural gap between the medieval world and the postindustrial globalized society, some common issues can be pointed out. Current situation is unprecedented, as is underlined by many commentators now. But, in fact, it is not the first pandemic to which humanity is confronted. Lesson, although so distant in time, should be revised once again.

LIMINAL TIME

Needless to say that the pandemic is a time when everything stops. One may just look now (March, 29th 2020) out the window and observe empty streets of big European, Asian or American cities or compare flight boards at airports of any day before the coronavirus outbreak and after the spread of the infection. Many people were forced to stop working, which caused a threat of a massive unemployment. Public communication was limited, shops were closed, so were all cultural institutions. Meanwhile many people spend time with their families in isolation, walking or watching TV. From a distance the world looks like it would have been a Sunday or some global holiday.

Many influential figures and authorities forecast, that the world after the coronavirus will not be the same as we knew it from the times before the pandemic (Žižek 2020). Numerous works, comments, talks and reports are now issued and will be written to explain the nature of that change. This new opening combined with ending of what once was and yet with the existing it this "time in-between" of the pandemic, may suggest that we could perceive it as a sort of a liminal time, like it was described by the famous work of Arnold van Gennep (2004). Social and political hierarchies are doubted, future of all aspects of cultural, social, economic life is not taken as granted.

And here again we may draw some analogy to the medieval times. Black Death

⁴ See *Exodus*, 12, 29-33.

⁵ In the Book of Revelation of St. John we read: "The first angel went and poured out his bowl on the land, and ugly, festering sores broke out on the people who had the mark of the beast and worshiped its image" (Rev. 16,2). The contagious disease was to be first of all seven plagues to come on Earth, so it could appear as an introduction to the Judgment Day (see also Mt 24: 36-44).

⁶ Most trusted is the one that the virus originated in bats (Zhou et al. 2020: 270-270).

⁷ <http://www.asianews.it/news-en/The-hypothesis-of-coronavirus-originating-from-a-laboratory-in-Wuhan-is-plausible-49550.html>.

⁸ <https://edition.cnn.com/2020/03/22/world/doomsday-prophets-coronavirus-blake/index.html>.

deeply affected social behaviors, especially in the large (for their time) Italian cities. It is worth to describe a whole spectrum of possible human responses to this extraordinary situation. Giovanni Boccaccio left a great account of them in the prologue to his *Decameron* (1929). The description is about Florence, that in the years before the Black Death lost about 60% of its population (Cesana et al. 2017: 17). Some of the people thought that restraint and moderation should be proper reaction to the pestilence. They closed the doors, ate light meals and didn't drink wine, listened to music and tried to forget about the disease ravaging their city. Some others, on the contrary, satisfied all their desires, drank in taverns, sang and feasted.⁹ Some others finally, who were rich, decided to flee the city seeking secure shelter in their countryside manors or residences.

Boccaccio later writes, that in all these groups new habits and new behaviors quickly occurred, that were very different from the ones that they had before. These were visible in funeral rites, marriages and all social events. People forgot their ordinary duties, both in cities and in the countryside, they refused orders from their superiors, only awaited death in their houses. Authority of both terrestrial and divine provenance was neglected, the Church showed up to be equally powerless against the plague as were kings and nobles. New forms of religiosity, as the flagellants, started to appear in this liminal period, that were not subject to any religious structure nor hierarchy of the feudal society.

This decomposition of the up-to-date social, religious and cultural orders, was temporal, but many factors that emerged during the pandemic, allowed or accelerated the transformation leading to the Italian *Quattrocento* and to the humanism of the Renaissance. In the public debate in 2020 much is being told, that the liminal time of COVID-19 will accelerate social, economic and technological transformations.

Novel virus will impose this liminal period globally for some time, maybe for months. Some changes will be permanent, the memory of that event will certainly stay for long and affect many aspects. It is already reorienting people's attitudes towards government, international agreements, importance of public health care systems, outdoor activities, social life, death, religion, technology. Certainly soon entire books will appear on it. It is impossible to describe all in one short paper, but I will try to touch at least few examples and show them by comparison with how these issues worked in the 14th century.

PANDEMIC AND THE POLITICS

COVID-19 pandemic reinforced or weakened some centers of power. National state governments become more dominant and the distance between the politics and ordinary people seems to shorten. It is by the fact, that every decision that is communicated in the media (lockdowns, quarantine, closing of shopping centers, travel limitations etc.) is immediately implemented with a direct and personal impact on all our lives. Crisis is not administrated by laws that are processed for months, but by quick

⁹ Today we also hear of "coronaparties" organized by youth that cannot adjust to strict quarantine rules: <https://www.fox29.com/news/police-break-up-corona-party-at-apartment-in-trenton>

actions undertaken by central state powers. In the moment of a disaster, when single people seek help in their suddenly worsened situation, state interventionism is what is expected in the first place. It seems also, that when the crisis comes, large international bodies, like the European Union, are temporarily forgotten.

What happened to the solidarity within the European Union when the coronavirus pandemic hit the continent? Many commentators agreed that European solidarity was weak and all countries put their own interest and safety in the first place. Gianluca Di Feo, vice-head of the influential Italian journal *La Repubblica*, writes in *Le Figaro* on 15th March 2020¹⁰, that the first thing Italy expected from their European partners was masks, goggles, antiseptics and gloves. European partners refused, France and Germany even forbade to export these articles out of their frontiers. The EU was slow in reactions and always adapted to the decisions taken by particular state authorities. Ironically Italy received an aid from two countries that are not in the European Union and usually are not associated with the liberal democracy: that is China and Russia.¹¹

COVID-19 pandemic showed how fragile is globalization and how weak are four pillars or “freedoms” of the European Union: mobility of goods, services, capital and labor. Within days the pandemic froze all of them. The virus inscribed in long chain of events revealing a new trend in world’s politics: the de-globalization. Brexit, for long postponed and discussed, happened to fall just weeks before the pandemic; war in Syria and the immigration crisis pushed many governments towards protectionism and lowered the rank of international treaties. It is also the trend we observed in politics of Central-European states, especially Hungary and Poland in recent years. Meanwhile pandemic arises a feeling of national solidarity, union in common fight against the virus. It is much more underlined than the need for international cooperation.

Liminal periods have this feature, that they suspend the applicability of widely respected rules. With the passage of time a reflection may come, that some of these rules were simply not needed or imperfect. What can the coronavirus change in our modern political life? After the pandemic’s end questions may appear on the efficiency of the authorities in confrontation with the disease. Similar questions arose in the Middle Ages weakening the position of the universal authorities, like the Church or feudal system.

Centers of power, like the Catholic Church showed to be as powerless confronting the plague as all other institutions. The pandemic challenged the Church and questioned its authority on terrestrial issues. Also showed, that priests and monks are same humans as everybody else, they died in same way and in same numbers. This decrease

¹⁰ <https://www.lefigaro.fr/vox/monde/coronavirus-francais-ouvrez-les-yeux-sur-le-drame-que-vit-l-italie-livree-a-elle-meme-20200315>.

¹¹ Between 22 and 25 March 2020 Russian Federation sent to Rome 14 military planes with medical supplies with some 100 medical staff (<https://www.euractiv.pl/section/polityka-zagraniczna-ue/news/koronawirus-rosja-wyslala-do-wloch-pomoc-medyczna/>). On the boxes there were inscriptions “from Russia with love”, which was a reference to the title of one of the movies about James Bond. Earlier, on 12 March 2020 Chinese medical team with 30 tons of supplies landed in Rome (<https://www.reuters.com/article/us-health-coronavirus-italy-respirators/china-sends-medical-supplies-experts-to-help-italy-battle-coronavirus-idUSKBN2101IM>).

in human resources among the clergy caused further institutional decline, because the Church needed to replace them quickly - education and spiritual predispositions of the new priests became less important.

Church had already been weakened before the pandemic (Gottfried 1983: 83-84). The papacy was on exile in Avignon. Internal tensions and the lifestyle of high ranked clergy caused that there was a growing gap between the institution and the laity. Black Death only exposed these vulnerabilities. Movement of flagellants that arose during the pandemic was condemned by the Church officials, but despite this fact supported by many people. Privatization of faith was observed also by the growing number of private chapels built in castles and rich manors (Putnam 1915: 14). Many spontaneous and often dangerous actions were undertaken by the people without permission of the Church or state authorities – of them most terrifying was probably the fate of European Jews. During the pandemic they were being accused of poisoning wells, spreading the disease or simply provoking God's vengeance for their distrust in Christ as Savior. Many thousand Jews were burnt on stages in the Western Europe. On 14th February 1349 two thousand Jews were killed in Strasbourg, which the plague has not even reached to that date (Gottfried 1983: 74).

Yet again, local centers of power functioned much better than universal ones. Italian cities remained unharmed in their structural organization – city council in Florence operated and acted even in the worst time of the pandemic. City officials and council workers even received higher wages (Caferro 161). Italian city-states, as the European kingdoms, survived the catastrophe in a much better condition than the Church.

PANDEMIC AND RELIGION

Privatization of religion came along with general growth of individualism (or individual thinking). New answers started to be searched beyond religion, in science. It was quickly discovered that the disease is spreading through air so the presupposition was made that bad smell was linked to the infection. Hence, the strange costume of Black Death doctors, where bird's like beak was filled with herbs and smelly oils to protect the person from feeling plague's odor. The nature of the disease provoked scientific, not only religious questions. Doctor Guy de Chauliac, medic at papal throne of Clement VI in Avignon started to examine the disease and himself became one of the very few that survived it. He was the author of *Inventarium sive Chirurgia Magna*, one of the first manuals to practical medicine. He is sometimes called "father of surgery" (Thevenet 1993: 208).

Decomposition of the Church structure, privatization of liturgy, flagellant movements being a non-orthodox popular semi-heretical movement that was successfully challenging spiritual leadership of the institutional power of the bishops – all that led to unprecedented weakening of official liturgy and clergy. Twenty years after the Black Death the biggest crisis in the history of papacy emerged, when Western Christianity was ruled by two popes at once (temporarily even more) – the epoch (1378-1415) that is known as Great Western Schism. The flagellants, followed by the crisis of Papacy, then works of Jan Hus, Council of Constance, period of Hussite wars in Bohemia and

Silesia – these were steps leading towards the beginning of Reformation.

In the fourteenth century, the pandemic undermined social religiosity paving the way for humanism and individualism of the Renaissance. Will it be the opposite in the 21st century? Contemporary culture is already very individualistic and secular, especially in the West.

In March 2020 the world saw unprecedented views of holy sites of all big monotheistic religions. Empty square of St. Peter in Rome and the pope alone giving the traditional “urbi et orbi” blessing; the area around famous Kaaba in Great Mosque of Mecca remains quiet. Some Jewish families will meet for Pesach only via Skype. The Catholic Church advised to avoid many celebrations of the Holy Week. All central celebrations in Rome, including the Way of the Cross in the Coliseum will have no public. This happens for the first time in recorded history.

While the Black Death caused a diversion from the Church, COVID-19 may cause, in my opinion, a turn towards religiousness or spirituality. It is doubtful however, if this turn will be targeted at the Church. The whole global consumption slowed down, so did the rat race in corporations, party life, socializing. People have more time for reflection on “big topics”, like the sense of life. New religious or spiritual movements may occur, but the need for engagement in a certain form of practice will arise. The faith in human omnipotence can be questioned again.

PANDEMIC AND SOCIETY

In the times when death became so ordinary, people observed that it is also democratic – it came for both rich and poor, noblemen and peasants, bishops and parish priests, knights and merchants. European motif of the *Danse Macabre* emerged in late 14th and early 15th century from the memory that the generation of survivors had from the times of the pandemic. Johann Huizinga writes (1974: 168), that 15th century instilled in people the idea of transience like no other epoch in the history of human culture. Uncertainty of death and life was also connected with the uncertainty of economic prosperity and future.

We have for long forgotten this experience. Most recent great contact that the Western civilization had with death was the 2nd World War and the Holocaust. Later, in the 50-ties and 60-ties, culture seemed to abandon the topic of death (Ariès 1989). This is why images from Italy with coffins laid in line in the church or taken by military truck to funerals seem shocking to all post-war generations. After a quick and relatively swift end of communism and collapse of the Soviet Union, Europe and most of the Western World entered the best period in its history – last thirty years were the time of integration, friendship, no wars, fairly stable economic growth, prolonged expected duration of life, less stress of catching a disease, almost unlimited mobility¹². Many signals suggest, that this golden age is now over. Some of issues, like the climate change, were present before, but people were unaware of them, and therefore did not consider to change their happy lives for that reason. Coronavirus is yet another threat that seemingly is about to put an end to this prosperity. The world has entered a more

¹² <https://www.businessinsider.com/whats-the-best-time-in-history-to-be-born-2014-9?IR=T>

difficult period of greater stress, possible long term economic slow-down, social problems. This will very likely also to influence culture, including art, literature, music.

Natural or social catastrophes, like pandemic, wars, economic crises result in breaking of the stabilized reality. This reversal of up to date social structure and universal stress caused by the fear of death, illness or simply atmosphere of threat imposed by the media, lead to creation of a new feeling of community. The spontaneous sentiment of solidarity is not structured, formed by social norms, nor institutional. Individuals are not subject to social roles they had before entering in liminal period. This *communitas*, as named by Turner (1967) create a new solidarity of units that suddenly became equal in confrontation of the threat. These solidarities are visible in self-help groups, virtual concerts, internet communities.

In the 14th century major European cities experienced a massive depopulation after a period of constant and rapid growth during 13th and early 14th century. Most of them lost over 50% of the initial number of inhabitants – for example Norwich in England that had a population of 27 thousand in 1333 was reduced to only 7,7 thousand in 1377 (Britnell 1994: 200). Some of the urban centers recovered only after many decades. This decline in the number of inhabitants improved the life standards of those who survived. Not only in towns, but also in the villages. Sudden shortage of manpower forced the landowners to make efforts to keep the peasants on-site. Otherwise they would decide to migrate seeking better conditions. This led to higher incomes and better work conditions. People received more land for their own. That was a first step leading to an end of feudal system and the birth of modern capitalism. Those who didn't want to remain in the village, went to the city, where there also has been a shortage of workers in almost all professions.

One of the impacts of the COVID-19 pandemic could be that the process of urbanization would stop or change. People being quarantined in small flats they bought for unreasonable high prices, discovered, that life in the province would be much easier in these days and the advantage of having a garden is priceless. Pandemic already has confirmed the possibility of having a fully remote internet work in certain professions, thus it may happen that more and more people will choose to escape the urban areas or to live in-between their cottage houses and the office located in city skyscrapers. On the one hand, pandemic can mean a return to localities, to local economic and social systems and networks; on the other hand, the internet can create a stronger network of supra-local connections.

To the people of 21st century limits imposed on their mobility seem irrational and temporal. Mobility was also a symbol of unlimited possibilities and one of crucial factors in the process of globalization – one could always change his or her situation by moving away. There has always been a “plan B”. Social mobility, a possibility to positively change one's social or economic status was linked to spatial mobility and encouraged migrations (see: the concept of motility, Kaufmann et al. 2004). Today lockdowns exist in almost all countries. Each country made own decisions on limitations in the flow of people so again, like in the past, traveler's first check is to review all existing laws and rules. Limitations on mobility are not likely to end very quickly.

Tourism, which now is estimated to be as much as 10,4% of the world's GDP – according to the report of World Travel & Tourism Council (2019)¹⁵ - will probably not recover for years. It is possible that many hotels, travel agencies, airlines will be bankrupting also long after the end of the pandemic. People will travel less and on shorter distances. Tourism, when reborn, could be therefore more local than global. The pandemic which was a cause for an increased mobility in the 14th century seems to be freezing the mobility in 21st century.

What is definitely changing already and probably will partly continue no matter how long the crisis lasts, is moving the culture and social life online. Not only culture, but also everyday duties and work. Instead of getting things done in person, people will get them done online first and meet only if it is really needed. That would reduce spatial mobility even more. The shift of our social lives online, already visible at least since 2012/2013 and the introduction of smartphones (see Twenge 2019), will probably accelerate after the pandemic. For only couple of weeks of the lockdown, we have observed schools, public institutions, healthcare consulting, shopping, cultural events, even parties – all organized in form of video-conferences, virtual meetings, emails or use of social networks. It is quite possible that new methods of political engagement will go online, including a possibility of on-line voting.

In the 14th century the pandemic also resulted in an explosion of individualism, but also particularism which we observed during the Renaissance. Decomposition of universal Latin and religious culture of the high Middle Ages caused by the Black Death led to emerging of literature in national languages and higher consciousness of identity. How it would affect the postmodern society, well individualistic already? Can it lead to reversion of it and creation of a more collective cultural pattern, even online? Despite the fact that international treaties may seem less important in the times of crisis, human solidarity experiences a revival – especially in local or national context.

It seems that the pandemic would be yet another contribution to the debate on social classes. During the Black Death, lower class was much more affected by the pestilence than the nobles. We read about it in *Decameron*, where 10 rich citizens of Florence decided to move away from the city. It was possible by many factors – from better hygiene standards to the ability of fleeing to distant countryside manors. Famous was the example of pope Clement VI who in order to save his life, spent weeks in Avignon sitting between two constantly burning fires (Kelly 1997: 307).

COVID-19 opened a great dilemma – what to save first: lives or economy. If we stop the economy and keep people closed in homes for a long period of time, the stocks will fall, currencies will collapse and the world will face a vast economic crisis. If we don't do it, more people die. If we keep people closed but don't manage to defeat the virus quickly enough, people die anyway as economic crisis would be followed by hunger and more disease, especially in less developed parts of the globe. From the beginning of the pandemic outbreak we observed two different strategies: one, expressed initially by the British government, partly present in Sweden and in declarations of the US president, Donald Trump. Second strategy, adopted by the majority of countries, is to

¹⁵ <https://www.wttc.org/-/media/files/reports/economic-impact-research/regions-2019/world2019.pdf>

lock as many things as it is possible.

The first option tells, that the disaster will end when a certain percentage of people will get through it and the “herd immunity” is developed in the society. The supporters of the lockdown strategy are however saying, that the emergence of this “herd immunity” will have to be paid with deaths of hundreds of thousands weaker members of the society: elderly, sick, poor and those living in less developed regions of the world with no access to proper medical care. People with greater chances to survive are the ones that are young, healthy, rich and live in countries where the health care services are at better level. Most privileged of all are corporation workers who can take all work duties to their houses and do it entirely on-line. Less privileged are physical workers, cleaning staff, sales, delivery or care workers. Again, modern world does not differ much from medieval realities.

During the Black Death people blamed others for the pestilence, especially those who were often blamed, that is Jews, Gypsies, lepers, all travelers and strangers (Shipman 2014: 410). It is too early to predict how the COVID-19 pandemic will impact the attitude towards strangers or immigrants in long-term perspective, but we may assume that it will reinforce anti-immigrant feelings, as the fear of being infected will correlate with the general racist views. It could be already observed in the beginning of the pandemic, when all Asian people were suspected of being carriers of the virus. The media provided numerous examples of acts of violence against Asians¹⁴.

SHOCK AND RESILIENCE

Today, in the end of March 2020 we know already that the coronavirus pandemic will have deep, global and long-lasting consequences. It is impossible to preview how profound will be the impact without knowing when the pandemic will end, but some forecasts, especially economical, are dreadful. This article is definitely not a place to examine economical prognosis, but few numbers should be given to highlight the scale of the threat. On 26th March 2020 the Washington Post informed that during only one week nearly 3.3 million Americans filed for unemployment – a situation that has never happened in history.¹⁵ The newspaper cite forecasts which tell about up to 40 million lost jobs by the end of April. This would rise the US unemployment rate to nearly 25%, which only happened in the peak of Great Depression of the 30-ies. In some sectors this drop will be possibly higher – as in tourism, transport, gastronomy, culture.

With the development of the pandemic, media informed about panic buying, empty shelves, even acts of aggression. But the shock will probably be causing other reactions, as results of social distancing, long time closing in small spaces, uncertainty, stress. Psychological, social and economic possible consequences of the crisis are hard to count. Maybe further problems will arise when people understand that the situa-

¹⁴ <https://www.latimes.com/california/story/2020-02-03/fear-panic-around-the-coronavirus-fuels-racist-sentiment>. Donald Trump in some of his speeches referred to the coronavirus as “Chinese virus”. Some regarded this expression as anti-Chinese.

¹⁵ <https://www.washingtonpost.com/business/2020/03/26/unemployment-claims-coronavirus-3-million/>

tion will remain such even longer.

Yet again it is interesting to watch how Europe reacted during and after the pandemic of the 14th century. In the beginning there was chaos, non-understanding what happened, expectation that this would be the end of the world. People were seeking divine help or fell into hedonism as it is well described in the Prologue to *Decameron*. Many fields were abandoned, many beasts and herds were left unattended. But soon after people started to cope with the disaster, seeking rational explanations and methods of protection. Pandemic, although dreadful and resulting in massive casualties, in the long time perspective occurred to have also positive consequences, definitely pushing forward social and cultural change. *Quattrocento* followed by the birth of Renaissance in Italy reveals one of the greatest examples of resilience in the history of humanity (Kumpfer 1999).

CONCLUSION

Black Death (1347-1350) indeed was one of these events in the history of the world that reversed the way of thinking and in long term changed the society, economy, culture and politics. Together with several other issues, the pandemic opened a chain of transformations which put an end to the Middle Ages and marked the beginning of a new era, that in consequence led to early modernism.

In 2020 small invisible virus changed the world once again faster and more deeply than any politician or political event could do. Nobody can predict full consequences of the pandemic, but it may be, that some books will have to be rewritten – including those of Francis Fukuyama or Yuval Noah Harari. In 1991 when the Soviet Union collapsed, Fukuyama proclaimed the end of history and the appearance of the last man (Fukuyama 1992). Liberal democracy was to be the ultimate and global political system and although historical events still continue to happen, no one would question this truth. We still don't know how the virus would change the world, but it is already discussed if the liberal democracy was the most effective to confront the disease. Harari in turn presented in his book *Homo Deus: A brief history of tomorrow* (2016) a very optimistic view of the future of humanity – he wrote that for the first time in the history of mankind more people die of surfeit than hunger, more die of suicide than of war, finally more die of ageing than of contagious diseases. And even if an epidemic happens, we are able to react properly and cope with it. We don't blame God nor accept what happens as a must, but we find solutions. Well, the current pandemic seems to challenge these beliefs.

Every few years we are alarmed by the outbreak of some potential new plague, such as SARS in 2002/3, bird flu in 2005, swine flu in 2009/10 and Ebola in 2014. Yet thanks to efficient counter-measures these incidents have so far resulted in a comparatively small number of victims. SARS, for example, initially raised fears of a new Black Death, but eventually ended with the death of less than 1,000 peo-

ple worldwide¹⁶. The Ebola outbreak in West Africa seemed at first to spiral out of control, and on 26 September 2014 the WHO described it as ‘the most severe public health emergency seen in modern times’. Nevertheless, by early 2015 the epidemic had been reined in, and in January 2016 the WHO declared it over.

(Harari 2016: 32)

COVID-19 pandemic seems to be proving, that unlike it was told by Harari only a few years ago, humanity is not much better prepared to cope with such a threat, than it was in the 14th century. Of course, time will show how quickly mankind would defeat the pandemic and at what cost. However, after only few weeks, it is clear and such is the majority of comments, that this situation has a potential to change much in the world’s culture and social life. And maybe it could even be first step on the way towards the end of postmodernity and liberal democracy (assuming that there is an end and a beginning). Individualism may give a way to collectivity, authoritarian power may occur to be more effective and more attractive for hard times than democratic systems, tight borders may be needed again and institutions like the European Union will be perceived as ineffective.

In 2020 the humanity rediscovered a word that has been almost forgotten: quarantine. It was invented in the years after the Black Death emerged when ships calling at the port of Venice had to wait for 40 (*quaranta* in Italian) days before disembarking (Tognotti 2013: 255). Today, alike in the 14th century, there is no better way to bypass the plague than isolation and closing, staying in one place and pray.

What lesson then comes to us from the history of the medieval disaster? The liminal period of the plague means reversing known social, economic, political and cultural order. It will (and it already does!) stigmatize social psychic, turn people away or towards God and religiosity, affect inter-human relations. But it will come to an end. After the liminal times a new order will emerge and it will probably be quite different from what we knew. In the 14th century it brought an explosion of human creativity, individualism and one of the most fruitful periods in the history of culture. It is hoped that in 21st century a similar mechanism will work.

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¹⁶ COVID-19, as on 27 March 2020, caused 26,945 deaths worldwide, but these numbers are getting higher with increasing speed (<https://www.worldometers.info/coronavirus/>).

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BIOGRAPHICAL NOTE

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RISK UNIVERSITY: UNCERTAINTY OF THE LATE MODERNITY COMING TOO EARLY

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ABSTRACT: The study examines how a regional university, having recently overseen a dramatic internationalization, deals with the consequences of COVID-19, and how the students - many of whom are international and coming from the global peripheries - experience the pandemic. The study is informed by the critical theory of late modernity and capitalism - especially the theory of uncertainty and risk (Beck, 1992; Beck, Giddens, & Lash 1994). It explores the power relations of the communicative dynamic between the administrators managing the crisis and the students perceiving and living it. It is an early-stage research report, published days after a pilot study was run. A survey among international students (including local, tuition-fee paying, and exchange students) was distributed to obtain initial responses. The analysis is complemented by insights based on close observation of the unfolding situation and analysis of the documents issued by the university. The findings explain the uncertainty experienced by international students, characteristic of many CE universities. The study covers the topics of attitudes towards epidemics, information imbalance, perception of security, and evaluation of the responses. The paper concludes with an urgent call to recently internationalized universities for a recognition of the complexity of students' fears.

KEYWORDS: COVID-19, pandemic, risk, uncertainty, late modernity, critical theory, peripheries, crisis communication

TRYING TO GRASP A CHANGE COMING TOO EARLY

We are witnesses of a great social experiment and at the same time a big social change, at least a temporal one. The pandemic caused by the novel coronavirus proves to have transformative potential, as did the other great epidemics studied by sociologists, like HIV/AIDS (Lupton 1994). Moreover, it is also obviously fundamental for sociology to document the change in general. The change we are attempting to capture is deeply (and irrationally¹) unexpected, rapid, even given the accelerating nature of the social reality (Hsu, Elliott, 2014), thorough and comprehensive. It encapsulates all dimensions of social lives, both of groups and individuals: economic, interactive, mediated, and ritual - power relations and structures as well as identities and selves we live by.

This paper has two specific aims, apart from a general sociological response to the shifting social reality. First, it is to examine how an international university in Eastern Europe deals with the consequences of the COVID-19, and second, how the students experience the epidemics. It must be stressed that Poland has only recently seen a sharp increase in internationalization rates and is a novice, institutionally and socially speaking. Moreover, compared to the Western European parts of the EU academic market, Poland is significantly cheaper and attracts students of the global periphery rather than centers, which results in the students having fewer resources (in terms of all kinds of capital) and being much more vulnerable than those who study in established universities, which results in different effects of the pandemic when compared to more affluent international students (Ye, 2020). Both the institutions and the students have hence only recently gone through a transition into the realm of international academia, and they are unprepared for yet another change, with the internationalization of higher education being a completely new context to both parties.

We are convinced our rapid response is very much needed to address the radical uncertainty (Pieri, 2020) that has an impact on the experience of the 'new normal' (Waltner-Toews et al., 2020) full of hazards. Sociologists have been theorizing the risk in the context of late modernity for decades now with Ulrich Beck (1992) being the main reference author.

We are seeking to present the university as an example of a peripheral, yet globally interconnected, international university that is additionally embedded in national regulations and directives from the Ministry of Science and Higher Education.

A survey was distributed among the students of international programmes as an immediate response to the unfolding situation in order to obtain their reactions and evaluations in the form of closed- and open-ended questions. This paper attempts to provide an overview of the issues which affect international students of the global peripheries, an already at-risk population.

¹ As Zeynep Tufekci (2020) argues, not only individuals, but also media organizations and leaders struggled to foresee the obvious consequences of the unfolding epidemics due to the complexity of the phenomenon.

LAGGING REFLEXIVITY OF THE RISK UNIVERSITY

Academia, including public universities have been a subject of critique inherently present in its operation (eg. Bourdieu 1988). The recent transformations (together with late modern societies) towards neo-liberal are frequent subjects of these critical analyses (Holmwood, Chaime 2019). Global higher education intensifies commodification of knowledge, fetishizes social mobility and exploits the tuition fee paying students' resources. The recent protests in well-established academies of the United Kingdom or the Netherlands unveil some critical responses of the community towards its constant technocratic and hyper competitive shifts. Regardless of these efforts the capitalist logic underlines the university operation, and the strikes serve as the indicators rather than solutions of the problem at the moment.

The optimization of functioning of the universities-as-companies involves risk assessment and governance (eg. Huber 2011). It means to improve the effectiveness, including economic performance of the university, rather than engage critically with what Ulrich Beck (1992) theorized as the organizing principle of the late modern societies. This paper is informed by the latter perspective. We follow the analysis of the notion of the 'risk university' (Robertson, Muellerleile 2016), recognizing the basic contradiction of the risk society, namely the modernization processes adding to the complexity of the globalized and interconnected society. This produces or induces the risks that the modern societies in turn strive to reduce and counteract. The 'risk university' is the one - paradoxically - that addresses the 'hazards' of capitalist logic instead of reflexively inquiring into the processes that are responsible for the situation in the first place.

Some Polish universities follow other European higher education institutions' efforts to close the gap created by decreasing local student populations. They are opening to the global educational markets. The efforts are made ad hoc, have often been coordinated recently if at all, and are mostly based on the geographical proximity and geopolitical situation of the students' countries of origin (Sin, Antonowicz, Wiers-Jenssen 2019), but they can be clearly theorised as a risk management strategy by those universities. With the abundance of international students, they are reducing the uncertainty revolving around their very purpose of existence.

In turn, the students are attracted by the prospect of a European Union diploma and relatively low tuition fees, trying to manage the risks of the late-capitalist order and buying into the logic of meritocratic promise of social mobility.

As Ulrich Beck (2010) noticed, the risks are unevenly distributed. In case of some universities, the tuition fees are significant additions to the institutions' budgets, but these are the students who 'invest' in their education and are in this respect totally dependent on the university. Their dependence starts with the dormitories for accommodation, through the international offices facilitating the legal stay, campuses being the centers of the student's whereabouts and frequently the only reference points on a foreign soil, and finally the most important: the study programmes and the diplomas awarded. There is a significant power imbalance between the university administration and international students.

Until now, standard discussions about risk and health issues have concentrated around a few main topics, such as immunisation, eating and drinking, smoking and public health (Denney 2005). The pandemic and its consequences are new risks on this list. However, different kinds of epidemics, such as cholera, plague, the so-called Spanish Flu or Ebola have shown up many times in history and were rather associated as one of the risks of the premodern period in the same way as disease, war and failing harvests (Denney, 2005). However, for the very first time, the pandemic in times of modernity caused such harm to the global economy, politics and social life.

We argue that the university and the students apply different strategies to tackle the risk of the effects of the Covid-19 pandemic. The former is using the modernist instrumental rationality, mostly through the administrative regulations of the rector and the chancellor, informed by the legal publications of the sanitary or higher education institutions - or, in the peripheral model - more established universities. The latter use individualistic strategies to maintain both psychological and physical security, also using the experts' knowledge but in a less directly hierarchical relationship.

The research has been undertaken at a middle-sized university in Poland (Central-Eastern Europe). It is one of eighteen comprehensive public universities in Poland. Located in the South-West part of the country, between two bigger academic cities, the less established university center faces severe competition from the more advantaged neighbors. The university and the city are quite attractive for international students because costs of life and tuition fees are among the lowest in the country, and the town is very well connected to other, bigger cities and to many European capitals.

The university itself holds more than 100 study programmes and specialities. The population of students is almost 8000 and decreases every year (currently 7802 according to data from March 2020). The university experienced a dramatic internationalization in the last few years. Thanks to funds within various programmes (e.g. Erasmus+) the university was able to establish and develop many connections all around the world and start a few international studies programmes in English. Not so long ago, there existed three offices dedicated to foreign students at the university:

- (i) The Center for the Eastern Partnership (CEP) - dedicated to students who come from the countries of the Eastern Partnership (a majority of whom being Ukrainian) and study mostly in Polish. Merged with the Student Affairs office after the reform in the Polish law and change of the structure of the university.
- (ii) The Erasmus+ Office (EO) - dedicated to the incoming and outgoing mobility programmes. The office oversees the students in exchange programs.
- (iii) The Office for International Study Programmes - created in January 2017 - was closed in September 2020 due to the aforementioned structural changes of the university - its competences shifted to the Student Affairs office and EO). Its intended function was to take care of regular students.

As a consequence of these actions and processes, right now (March 2020) 7,6% of the university's regular students (studying towards bachelor's, master's or doctoral

degrees) are foreigners. Additionally, there are 88 Erasmus students, so altogether, 8,7% of the university's students are not citizens of Poland. Because the internationalization of the university at this scale is quite a new phenomenon, there are numerous problems, specific to such a rapid internationalization, faced by students, teachers and administrators who take part in this process. Because of the coronavirus, these problems became much more urgent than they were before, and additionally, some new problems emerged in the context of internationalization.

We would like to highlight that there are important reasons to look into internationalization of higher education in the context of spreading pandemic, as with the foreign students both them and the institution are exposed to potential harms. One hand, international students are much more mobile than local students and hence more prone to transmit the contagious disease, what poses a threat to themselves and to the university that would otherwise be more isolated. On the other hand, they are put under enormous pressure, incomparable to the local students. They are far from their homes, want to (or sometimes are forced to) go back to their countries, and at the same moment are excluded from most information in their current place of stay, just because of unavailability of information in their own language or even in English. Now, the students stay in isolation and face a discrepancy of information from different sources. Lacking social capital in the host country, they cannot return home like the majority of the native students.

There are several kinds of such students at the university:

(i) Incoming exchange students - especially the Erasmus+ program students. They are defined by the temporariness and the timing of their situation. They are supposed to stay at the university until the end of the semester. It is not clear what happens next in terms of academic teaching, and many of them arrived just at the beginning of the outbreak.

(ii) Outgoing Erasmus students - the local, full-time students in various parts of the World, especially Europe. They are dependent not only on their own university regulations and support but also on the support of the university where they study currently. Moreover, the Polish government and other governments take actions that are often unilateral. The borders would be closed, so only Polish students can come back home, and to the university. But many of these students are tuition fee-paying foreigners. They cannot come back to the university; they can only go back home.

(iii) Foreign students who pay tuition fee and study towards diploma. Admittedly their life and plans are more stable; they come to study for two or three years, usually already have developed networks of friends (fellow internationals), and plan to stay here for longer. Some of them went back to their home countries for winter break, and are not able to come back (e.g. from Iran). They are in relatively good condition - staying at home. They are able to use the resources of the family and simultaneously they can participate in classes online.

The Polish government, similarly to other governments in Europe and outside of

the Old Continent, have made some radical and strict decisions to limit the spread of the coronavirus pandemic. The new laws, regarding many different areas of social life, have been implemented in Poland in the form of the state law passed by the national parliament, or in the form of specific ministers' regulations.

On the 2nd of March 2020, the Polish parliament adopted the legal act on specific solutions related to the prevention, counteraction and eradication of COVID-19, and other infectious diseases and crisis situations caused by them (position 374). The act allows workers, for example, to work remotely (if possible). It gives additional social care options for parents with children, and maximum prices of specific goods (such as respirators and other personal hygiene products) were implemented by the Minister of Health, providing restrictions in case of epidemiological danger.

On the 11th of March 2020, there was a crucial day for the implementation of restrictions on the territory of Poland. On this day the Minister of Health added the virus SARS-CoV-2, and illnesses caused by it, to the list of illnesses that cause hospitalization (Regulation of the Minister of Health of March 11, 2020, amending the regulation on the list of diseases that cause hospitalization, position 409). Moreover, the Minister of National Education published the regulation that from 16th March 2020 till 25th March 2020 all schools and kindergartens are closed, and classes are suspended (REGULATION OF THE MINISTER OF NATIONAL EDUCATION of 11 March 2020 on the temporary limitation of the functioning of educational system units in connection with the prevention, prevention and combating of COVID-19, position 410).

On the 13th of March 2020, the government published another series of legal acts related to the virus SARS-CoV-2. The Minister of Health announced a state of epidemiological danger (Regulation of the Minister of Health of March 13, 2020, regarding the announcement of an epidemic emergency in the territory of the Republic of Poland, position 433).

Changes of the functioning of the Higher Education in Poland have been introduced by a series of regulations by the Minister of Science and Higher Education. In subsequent legal acts, the Minister decided to suspend all classes in studies, postgraduate studies, and other forms of teaching until March 25th (Regulation of the Minister of Science and Higher Education of 11th March 2020, position 405) with a later extension of this period to April 10th (Regulation of the Minister of Science and Higher Education of 23rd March 2020, position 511). The universities were encouraged to teach all courses online during the suspension time without the usual limitation of ECTS points being impossible to get remotely (Regulation of the Minister of Science and Higher Education of 11th March 2020, position 405). It extended the validity of students IDs (Regulation of the Minister of Science and Higher Education of 12th March 2020, position 420) and doctoral IDs (Regulation of the Minister of Science and Higher Education of 12th March 2020, position 418), released employees from the obligation to work in their workplace, with an exception for cases in which the job is necessary to ensure the continuity of the university's operation (Regulation of the Minister of Science and Higher Education of 16th March 2020, position 455), gave the possibility to continue online teaching and to validate learning effects online (Regulation of the Minister of Science and Higher Education of 23rd March 2020, position 511), and made

it possible to make college decisions online (Regulation of the Minister of Science and Higher Education of 25th March 2020, position 528).

It is important to note that these regulations did not take into account the complicated situation of foreign students. Albeit, they gave a lot of new possibilities and freedom to the university authorities in terms of online decision making and establishing ways of e-learning at particular universities. Unfortunately, the regulators, as well as the university authorities, did not consider the problem of the digital divide, the lack of Internet connections and possible problematic access to devices. Moreover, many of these regulations remain unknown among students, especially foreign students, who often do not speak Polish and are unable to check these regulations on their own. This is why there is a crucial role and responsibility of university authorities, officers, and workers, in terms of effective communication policy and crisis management.

As a consequence of the government's regulations, the universities had to respond by introducing changes to their internal acts. At the university in question, the Rectors and the Chancellor responded with a series of internal regulations, which we will skip as they concern only university workers and will instead focus on those regarding the students directly. In cooperation with the Sanitary Office, the university's authorities implemented a rule that all students coming from abroad must spend fourteen days in quarantine.

The very first regulation of the rector of the university, from February 28th, was a ban on all travels of staff, students and doctoral students to and from countries defined as countries of higher risk. In the beginning, the regulation included the list of banned countries, but later the record was changed and referred to the list on the website of the State Sanitary Inspection (change on March 6th). On March 10th, a day before the government's regulation, due to the decision of the alliance of a few universities in the region, the rector suspended classes from March 11th until further notice, and cancelled all international travels, all university's events, and banned the lodging of new people in the dormitories. The decision was surprising to the academic community because there was no information about further steps. On March 11th the Rector of Teaching and Student Affairs, in a letter to the Deans and study coordinators, recommended e-learning. On March 13th another regulation was published with the details about remote work for the university's administration. As of March 16th, due to the rector's regulation, all consultations with students should be done remotely via phone or internet, and university offices should work mostly remotely, with limited office hours. There was not one system, recommendation or regulation about teaching tools for the whole university so teachers could creatively decide how they would accomplish e-learning. Some deans recommended using various open-source software, so as not to overload the university's servers. The information about the online form of class and teacher contact has been published on each faculty's website.

On March 18th, one of the more important regulations appeared. The dormitory was closed for people who do not live there, and a curfew was set for its inhabitants from 10 pm till 6 am. Only people who could prove that they work after these hours could enter the dormitory later than 10 pm.

Additionally, due to many student questions on the main university's website, FAQ

was published and are continually updated. However, at the moment of submitting this text, the latest Polish version has been updated on March 25th and contains answers for 23 questions, and the latest English version from March 17th contains 23 questions. However, there is a significant discrepancy between one of the answers and the current state of affairs. The information on the website states that there is no plan to close dormitories, but according to the local media news from March 27th, one of the dormitories has to be emptied by the end of March and will be at the regional government's disposal. It is the decision of higher authorities, but there is still no official information on the university website, or internal documents, which causes many questions from students and mistrust of the university's statements.

In order to make sense of the crisis situation, steps have been taken by local sociologists to facilitate the monitoring of the problem. The calls for integrated communication policy, coordinating actions with the sanitary services amid the returns of students from China and Southeast Asia, or Ukraine (with economic/migratory ties to Northern Italy), were dismissed by administrators of the university as panic. Therefore, a survey was constructed in order to monitor the situation of the international students in the wake of the pandemic. The participants from Azerbaijan, Cameroon, Croatia, Ethiopia, Iran, Nigeria, Poland, and Turkey responded to the initial call distributed among the class of quantitative analysis in the summer semester of the academic year 2019/2020. Most of these students are tuition fee paying students, but there are also Erasmus+ program participants and regular Polish and EU students (not obliged to pay any fee). At the moment, most of these participants stay in the town, in one of the university dormitories, but some of them reside in family homes nearby (Polish students) or in their home countries (foreigners who went for the semester break and could not come back because of the restrictions related to the pandemic). One of the students is currently on Erasmus mobility at a different university in Greece. It is a pilot study before much wider research, which is planned to be carried out within this course with the students in the coming weeks, on a much more extensive sample, including other international universities. Therefore, the aim of this early stage analysis is purely exploratory.

DEFERRED PERCEPTION AND THE CONSUMPTION OF RISK

All the research participants heard about the virus when the epidemics broke out in China, but they downplayed the potential effects using multiple strategies characteristic of late modernity. First of all, some approached it as a mediated (and hence, remote) danger, that has been normalized as a part of the everyday experience and is rendered as part of the complexity of modernity.

I didn't care much. Every year there is a new virus that comes and "kills" thousands of people (or animals), and some governments over-react the situation to hide their corruption with new "problem", the biggest part of the population is not affected by anything or just "goes through" it and overcome virus/infection by medicament or natural immunity, so I can say that I got used to it, and it did not mean to me much. It's like a war for most of the people, as long as it is far

from sight, nobody cares (m_Cro_30)².

There is significant mistrust towards the government's actions expressed in this quotation and the expectation to dramatize the risk. Furthermore, there are references to some scientific rationale (and language), applying the internalized expert's knowledge to normalize the phenomenon. Anthony Giddens (2013) famously called it 'double hermeneutics,' characteristic of reflexive modernity and individual strategies to build ontological security (Giddens, 1991).

Secondly, some tried to distance the problem from themselves in various ways and kept certain remoteness to the problem. They did not consider the problem as just a mediated issue - they would admit it was a real problem, but with spatially limited impact, not affecting their territory:

(1) I thought it would stay in China, and they will find a solution (f_Tr_25).

(2) I didn't take it seriously because I had hoped that China would put it under control and never imagined it would expand to the world like this (m_Eth_27).

(3) I did not expect that it will spread around the world and will affect the people in this scale (m_Tr_25).

(4) I didn't think Europe would be harmed (f_Tr_21b).

(5) When I heard about coronavirus for the very first time, I thought it concerns only China. I didn't even expect that it would affect Poland (f_Tr_21a).

(6) I never thought it would come this close to me (m_Cam_30).

In the six statements above, it is visible how the respondents use the same strategy to distance the problem from themselves in a different way. In the statement 1. and 2. they limited the virus to the status of the regional problem of just one country, which can probably resolve the issue, so it wouldn't spread further. In the following comments from different participants, they did not reduce the virus to just one country, but still did not consider it as a global issue. In the subsequent statement, the virus is not considered a problem which could reach Europe (4) or Poland (5), and even if it happened, there would be a medicine already. In the last statement the personal situation is considered. These five stages and distances (a local problem far away, global, European, national, personal) might be considered in further research as kinds of safety zones of problematic appropriation. Where is the border between a safe distance to the problem, and a distance at which the problem starts to bother a person and becomes a perceived danger?

Third of all, the students believed that a medical response to the new virus would be

² All quotations of students statements are coded according to the same key: the first part of the code indicates gender (f - female, m - male), the second part of the code indicates the country of origin (Az - Azerbaijan, Cam - Cameroon, Cro - Croatia, Eth - Ethiopia, Nig - Nigeria, Pol - Poland, Tr - Turkey), the last part of the code indicates the age of the student. In case when the combination is similar for the certain student, we added letters a, b, c... in the end of the code.

obvious and would come quickly, putting a significant amount of trust in the experts.

(1) I think a vaccine is coming soon! (m_Az_26)

(2) I thought medicine would be found for the coronavirus (f_Tr_21b)

This seems to be typical for the contemporary interpretations of death, diseases or catastrophes. According to these discourses, there are no unsolvable problems, because the expert society and its modernized technology hold all the solutions to possible problems. Everything is just a technical issue, including death. The virus is not just a killer anymore. People do not die just because there is a new deadly disease. People die because there is no medicine yet, but it is just a matter of time. Science can solve all problems, including death. It is worth noticing the exclamation mark in the first sentence. It has a purpose to strengthen the statement and show the strength of this trust in science and contemporary medicine.

The majority of participants are afraid of the pandemic (17), are annoyed because of the inconvenience (20), and are bored because they have to stay home (18). They individualize the risks and refer to themselves and their personal freedoms when assessing it with a somewhat consumerist style: complaining about the 'interrupted service' of everyday consumption. A student commenting on what has changed elaborates that her:

rate of shopping which is my hobby has reduced due to restrictions of often movements. Though sad but to an extent I am happy because this helped me to devote myself to savings. (f_Cam_26)

At the same time, 21 of the participants are curious about the current events. 14 participants think that from now on, everything will be different, and 9 people believe that the virus will be defeated soon, and 1 person thinks it will stay with us forever. When students consider the situation in the city and in Poland, they say that everyone is in panic. They also notice that people are supposed to stay home, but they can see a lot of people by windows, which seems contradictory.

Regarding the immediate risk, 15 out of 23 participants were afraid that they could get the virus, and only three of them are not afraid. One of students declared:

I can see the end, due to the numerous deaths (m_Cam_38).

At the same moment, the students are afraid not only about their personal health, but also about the local healthcare system in case of getting the disease. Another student says:

I'm a foreigner in Poland, and I'm so afraid that if I get the virus what will I do? We are facing racism here so if I go to the hospital I'm not so sure that they will take care of me (f_Tr_21c).

Besides their own health, they also think about their closest family and friends. 18 of the research participants are afraid that one of their close ones could get the virus, and only two of them are not afraid about it. So, more students are concerned about their close ones' health than their own. They declare:

I am scared for my family life (f_Pol_23).

Locating the problem in the individual is in line with the subjective strategies underlined by the late modernity theorists. As one of the respondents put it:

Coronavirus has proved that everything around me is so temporary. things our lives revolved around... school, work, gym, malls, movies, society have all gone for a toss as we are learning to live without them. It has taught me that in the end, it's my own home and family that keeps me safe, and God too (m_Nig_28).

More than half of participants are stressed because their financial situation is getting worse now, and this is one of crucial points of students' uncertainty. They underline that they can't find a job because of the pandemic, and even when somebody has a job, she has to stay home because the workplace is closed. Moreover, they are afraid that even if the virus goes away, they will be stigmatized by employers because foreigners will stay suspicious.

We asked students also to evaluate the government's and university's policy towards coronavirus. These questions didn't mean to measure the real opinion about the governmental or university's actions, rather the feeling and the sense of security. Most students think that the government's actions are effective. Some student even declare:

Poland is the best at controlling this situation compared to the other European countries (f_Tr_21c).

18 students agree that universities' actions are reasonable. However, even if their general opinion and feeling about the university's actions is positive, they underline that their education stopped. They also noticed that the university is a place of higher risk, because there are a lot of youths who are exposed to the World.

The university started e-learning mode on March 16th, and 6 of the students evaluated it as a very good idea, while 11 declared it was okay, and two of them thought it was a bad idea. However, independently from these declarations students don't believe that e-learning is equal to classic lectures and classes. The fact about the university being closed is itself scary to the students.

My university is locked down and the opening day is not certain. This is the scary thing about my academic year (f_Tr_25).

All of this in general leads to international students' uncertainty: 19 participants of our research feel uncertain about their near future because of the pandemic.

I have no idea what will happen next (m_Eth_27).

They declare they try to live their lives normally, but that it's impossible:

The situation changed everything in my daily life. University is closed, my work is closed. I am at home all the time. I go out only for shopping. I am trying to have a normal life but it is impossible. I am doing something all the time (reading, cooking, cleaning) but it is not a normal situation. All the time I am scared that someone from my family, friends can be infected. All the time I have a bad moon,

I cannot sleep. I am stressed all the time. I am afraid to turn on tv or the internet because there is still information about the next infected or dead (f_Pol_22).

The lack of information about system solutions leads students to uncertainty, and to making important decisions very rapidly, without a second thought, because there is no time for that.

Fear industry with the leading role of mass media creates the feeling of uncertainty and causes overestimation or underestimation of risk.

All the time I have a bad moon, I cannot sleep. I am stressed all the time. I am afraid to turn on the tv or the internet because there is still information about the next infected or dead. (f_Pol_22)

People look for safety and try to find it in their home, with family, even when objectively it would be better to stay where they are right now. It's not about the rational calculation, rather about the feeling of being safe. The good example are Spanish students who wave between staying in Poland and going home, and finally choose to go, even when the travel itself is risky, and in their point of destination, there are many more people who are infected and who actually die because of the virus.

THE NEED FOR RAPID RESPONSES TO ACCELERATING PANDEMIC

The survey done has a few significant limitations and constitutes a very early-stage piece of research of various phenomena connected to the pandemic of COVID-19. First of all, the sample size is too small to make any significant generalizations, even for one university (23 cases). However, the research purpose was to recognize the situation and possibilities for further investigations, and it was accomplished. Another step will be developed, in the form of a more detailed and deeper conceptualized questionnaire distributed among a statistically significant random sample of the university's international students.

Second of all, it is just a pilot study done at only one university, though the problems described seem to be much wider and typical for similar-sized universities in world's peripheries. To prove this we would like to perform similar research in a few different universities in the world³.

Third, the limitation is the survey questionnaire itself. In many cases, we decided to resign from the answers suggestions to gather qualitative data, which will be further used for the conceptualization of concepts and problems. In many cases, further conceptualization is badly needed. For example, when asking about the government or university's policy towards the crisis, the general feeling may be positive, but asking more specific questions, addressing more specific problems, may give us different results. The set of items has to be developed and specified.

There are certain implications to be drawn though. For university administrations - need to recognize uncertainty of the students too. For sociologists - the conceptualization of reflexive modernity in globalized education generates a new level of problems to address, especially amid the epidemics. Apart from the initial questions

³ If you are interested in cooperation, please contact us.

we posed, some further research questions we intend to ask touch upon the rapid distance learning revolution: what are the ‘risks’ of remote teaching and learning, who has skills and access and who has not? What amounts of immaterial, digital labor are to be performed and underpaid by the university staff (Woodcock, 2018)? What are the consequences of platformization of the university for privacy, surveillance, algorithmic governance etc. (Carrigan, 2020)?

The pandemics unveiled the contradictory dynamics of the risk university that is visible on the margins of global higher education. The more so, that both the change and the response comes late. Further research on this problem is needed to apply effective mechanisms to attempt to bypass the disadvantaged combination of the peripheral university and the students coming from the global South.

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FROM CORPORATIONISM TO COOPERATIONISM: REVERSED GLOBALIZATION, COOPERATIVE POLITICS AND EXPANDING ONLINE COMMUNICATION IN POST-PANDEMIC TIME

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ABSTRACT: In post-pandemic time a redefinition of politics and globalization is more than possible. There are a lot of possible scenarios – one of them is the cooperative model as an antidote to the polarized politics and corporative driven globalization. The aim of this short discussion paper is to present the proposal of the shift from corporationism to cooperationism as a functional model in addressing challenges locally and globally.

KEYWORDS: globalization, politics, corporation, cooperation

The world in November 2019 was in a good economic condition, though several threats and problems could have easily disrupt or undermine the growth and caused instability. The annual growth of the global economy was almost 3%. Growth in 2020 had been projected to 3.4 percent (*International Monetary Fund* 2019). Total international tourist arrivals reached 1,4 billion in 2019 with total international tourism exports (International tourism receipts plus passenger transport) altogether of an astronomic digit of USD 1.7 trillion (*International Tourism Highlights* 2019). Another example of a very intensive connectivity was the busiest air traffic on July 25, 2019, with more than 230 thousand flights cruise through the sky all around the globe. It was aviation's busiest day in history. The indicators given above are only a few chosen to exemplify

interconnectivity and globalization in its apex.

In an ongoing discussion on globalization, the scholars and publicists have been analyzing this complicated process in its various aspects and nuances. For many of them, the globalization has created not only opportunities but disadvantages either.

The debate itself has provoked questions on the limits of globalization. About its scope, layers, technological and communicational attributes. The idea of globalization founded by the West was initially focused on trade with settling down tariffs and unconstrained flow of capital funds and investment. But in the following years, the globalization with its dynamism has included many other areas, such as intercommunication, internationalized labor. Globalization is a dynamic process and provokes the following questions: does interconnectivity mean that international cooperation has achieved a higher level of institutionalization and more advanced global governance? Does the global acceleration create functional international regimes dealing with a wide range of issues from security to technological, economic and financial cooperation? Although globalization has been a dynamic and multidimensional process, but it has not established the global government – apart from some examples of global governance as the World Trade Organization, World Bank, International Monetary Fund, European Union with its institutions and others highly professionalized in addressing strictly defined issues.

Globalization as a complicated process provoked the severe debates in the 1990s and 2000s, including often contradictory views and opinions. On the one hand, it was perceived as a new form of inequality and oppressiveness and even immoral corporative business (Beck 2000) to be found as an accelerator of democratization processes (Fukuyama 1992) or as the right recipe for a clash of civilization (Huntington 1997) on the other.

In the debates, the problem of deglobalization or reversed globalization has been omitted. Authors have praised various aspects and the intensity of globalization seemed to be an unstoppable process. The financial crisis from years 2008-2012 shaken the global finances and banks that were operating globally. The financial sector was deeply sunk in toxic credits and unable for self-regulation and badly needed state funds from taxpayers. Almost a billion USD of stimulus programs undertaken by the United States did not reform substantially the financial sector and did not change the corporative drive of globalization. The conviction of unlimited growth has prevailed again without deep reflection. New potential bubbles have appeared on the horizon. Adam Tooze in his famous book about the negative ramifications of the financial crisis indicated that it brought to the sudden wave of populism in Europe and the United States. The most obvious examples among others were Brexit and the election of Donald Trump (Tooze 2019). After the financial crisis, a tendency to the reversed globalization and protectionism has been observed. The rise of populism has weakened the foundations of globalization and institutionalization and sharply defined its limits. Some societies have assumed a critical position to the concept of globalization at the expense of sovereignty.

Previously, the tendency for reemerging a more powerful state was initiated by terrorism – which gave a reliable excuse for curbing some of civil rights as accepted

and necessary cost for security. Since 9/11 the state has reemerged more vital with a strengthened role in combating terrorism in all its forms, with additional capacity for surveillance. The United States spent enormous sums on the global war with terrorism (GWOT). As a result, the counter-terrorism has brought a deep instability in Afghanistan and Iraq. Almost twenty years have passed and Al Qaeda is operating and dispersing its cells to many other states through Asia, Africa, and the Middle East either. The other threats and challenges, such as nuclear proliferation, rising regional and global rivalry, proxy wars and growing influx of refugees to Europe were on the list before pandemic outbreak. As a result, the pandemic possible global spread seemed to be a far and no imminent threat. Except for some warning signals from the World Health Organization and signaled by Bill Gates the global pandemic in the 21st century was a topic for the literature and the science-fiction movies (Gates 2018).

In late 2019 the SARS-CoV-2 outbreak in Wuhan. It seemed as other earlier pandemics to be curtailed much earlier without disrupting the economic activity within the states and globally. The novel virus has spread too rapidly and met with too slow counter-response. Probably decision-making procedures have been too slow even in autocratic China. Now is also difficult to assess how far are open and individualistic societies vulnerable to the spread of COVID-19? Is freedom put at risk?

For the first time in history, the global supply-demand chain has been so deeply disrupted and even partly paralyzed. Governments around the world have imposed lockdowns and other measures in a bid to slow the spread as the death toll caused by COVID-19 climbs to almost 40,000. Considering accounts of Imperial London College and gloomy predictions if left unchecked, COVID-19, the disease caused by the virus, could kill over half a million people in the United Kingdom and 2.2 million in the United States being a catastrophe for health-care system in both countries (Blyth 2020). After taking such drastic precautions the final death toll of a novel virus in the United States probably would be limited to 100,000 and according to the more pessimistic scenarios to 200,000, or even – in the most pessimistic predictions – to dozens of hundreds of thousands.

Still, there is no final timeline for the full reopening of all economies deeply paralyzed by novel virus. For example, in New York City, the apex of the death toll is predicted in mid-April and is not certain how long the declining would take. It seems that many states will remain in a lock-down through all April and even May. Lockdowns lasting more than two months would cause an extremely deep economic recession and rampant, double-digit growth of unemployment. In February 2020 unemployment was the lowest since 1969. In early April 2020, the unemployment rate in the US has grown rapidly to 10 million already. It is very difficult to predict now how deep an economic recession would be. Since 1945, the Western economies have never been almost entirely locked-down.

Looking at the world after a pandemic can be treated as an intellectual exercise in forecasting different scenarios. It is highly hypothetical and probably inadequate because of the situation changing too rapidly. There are a lot of uncertainties because the pandemic is still going on and unresolved threat fastly spreading across many states and continents. It is not certain when the momentum of a post-pandemic time

will be achieved and declared. A highly plausible scenario is existing for a long time in the midway between half-suppressed virus and necessity or reopening economies. In that model, the state apparatus is gaining almost unlimited possibility and excuse for surveillance of its citizens and curbing their freedoms with the application of the most modern technologies. The second problem is related to state capacity and resources in the fight against the novel coronavirus.

Lockdowns are causing damage to the economy and are negatively affecting the most sensitive branches such as tourism, events, restaurants, hotels, theaters and many others. The crisis entails both negative and positive effects for national and global economies. The crisis can be perceived as a reset and essential impulse for reorganizing the society and economy both on a local and global level.

Although it is much easier to depict the catastrophic scenario of the final economic collapse igniting conflicts and political turmoil, only positive ones will be taken into consideration in this text.

A basic assumption is that the crisis entails change and new openings with all re-sets, reforms, and corrections in order to avoid the next pandemic imbroglio or deep crisis from the rapidly going climate change. The current coronacrisis is perceived as a chance for a new remodeling of the economy, state, society, and international system.

As an urgent issue, the politics itself as the essence of organizing the political life and power on each of the levels from the bottom to the top should be reconsidered. Is it a possible change of political game? Is it a possible sustaining highly polarized political scene for example in Poland and the United States? The deeply polarized political scene will not be unable to deal with significant and devastating crisis and economic depression. Political rivalry is an asset of discourse in a democratic political system and a stable environment. Facing a deep crisis, the society is looking for leaders who can effectively deal with the recession. Moreover, political conflicts are provoking unnecessary tensions that can jeopardize the entire political system. Paraphrasing Donald Trump's slogan – making the community great again is essential needed to humble egoistic attitudes and particular interests. Solidarity and cooperative societal models seem to create a more supportive social environment. Innovation is essential for absorbing great numbers of unemployed people. Such a general idea was proposed by Bernie Sanders with his new green deal of promoting and implementing the energy without fossil fuels. Cooperative and subsidiary from the bottom to the top would impede positively for energizing democratic processes.

The cooperative model should be adapted in communities, states and globally. In the after the pandemic world, a cooperative approach can mitigate or slow-down threats including pandemics, climate crisis, refugees, cybersecurity and terrorism and other challenges. Wider perspective on these challenges would help to avoid wrong decisions and employing costly strategies.

The bitter lesson from the ongoing crisis is almost a lack of international solidarity in the fight against COVID-19. China due to Chinese New Year ignored the first outbreaks of a novel coronavirus and later has concealed some facts of it. Growing and annoying data should ignite drastic respond which was needed while the costs were not put at stake. The precious time was lost. An extreme example is the case of the

United Kingdom where after initial reckless ignoring the novel virus, eventually, the authorities ordered strict quarantine, social distances and locked major places of the country. Inability and ineptness in responding to the COVID-19 both locally and internationally results in increasing spread of it and higher death toll and the cost for lock-down would reach skyrocketing trillions of US dollars. Another aspect is related to societal pain and insecurity caused by the recession. It is a chance for more effective, multilevel and international cooperation. The institutions like the World Health Organization and other forms of cooperation would be more effective and much better equipped to face new pandemic. Global threats need a global response. In the case of the COVID-19, it has been fragmented respond and the cost is a global recession. Knowledge sharing instead of lonely interpreted informations.

Another possible scenario would be a reversed globalization and more locally oriented production and supplies. The crisis is posing a challenge to several apparently unshaken aspects of globalization, such as interconnectivity, technological transfers with know-how and as creating a great opportunity for the development and investments in more inferior regions. The production is dispersed too much in different continents due to lower costs. Pandemic has shown the weakness of such assumptions e.g. the strategic US drugs and protective equipment have been being produced abroad. Globalized production is cheaper but riskier in case of an unexpected crisis as pandemic. Probable outcomes would be state regulations to reinforce the corporations to bring back its production to the home country. The most important economic benefits from globalization have been lost in the coronavirus locks-down. It would have a heavy impact on reversing this process.

With the reversed globalization, the international tourism would probably shrink around 50% for some time due to both risks from the potential pandemic outbreaks and political instability in regions that are in the recession caused turmoil but also due to global pauperization. That tendency would be advantageous for local micro – tourism.

A very crucial aspect of the global situation is a sudden increase of online communications – both in working and learning. Various technological solutions, especially apps such as Teams or Zoom are rapidly increasing its share in the cyber market. The online communication tools and techniques are advancing and are becoming more attractive, and whole societies are learning how to use it in everyday life. Apart from the educational sector, businesses – especially SMEs are going to be more active in online communication and management. After pandemic, the tendency may not reverse and it may become a necessity for educational and business to keep some aspects of their activities online.

CONCLUSIONS

We all are waiting for a great come back to public life with all our activities at work, schools, universities, business, entertainment or culture. Pandemic has envisaged us that our stable way of life is jeopardized. Prior COVID-19 the world was obsessed with the idea of economic growth driven by constantly growing consumption despite the

red alerts of a global climate crisis approaching.

Pandemic is giving us all a generational experience, debunking the fragility of our stable existence. Now all our assumptions have been tested and there is the right moment for redefining and improving social, political and economic models the world is functioning within. It is just a small try how life in a global climate change crisis could function.

One of the improvements should be rethinking the idea of huge corporation driven false development, concentrating on the financial benefits at the expense of the natural environment, security and local communities' wellbeing. The ideological shift is more than needed, towards the concept **more cooperationism and less corporationsim**. The cooperative model should be adjusted to the political system and economy. The globalization was an advantageous process for great corporations. Their benefits have evaporated in time of corona-crisis which clearly exposed all global problems of too long and unsafe chains of production and supply. The next step would be decreasing overseas activity of many corporations and enforcing the comeback of some crucial business into the home market.

Finally, the politics should be redefined. The corona-crisis urges for a more coherent and responsible response to rising social tensions. The cooperative model of politics should be based on the broad consensus.

There are rare moments for undertaking a great reset – similar to this of year 1989 when communism collapsed. Tackling global threats seems to be possible only with a cooperative approach on different levels – from local communities to international relations. The COVID-19 has shaken our societies and economies. Probably this is the last such a mild global challenge before the next ones, probably harder and more destructive, climate change driven come around. The clock is ticking.

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